DOCUMENT RESUME

ED 436 967 FL 026 090

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TITLE Virtual Language Learning: Finding Gems Amongst the Pebbles.
INSTITUTION Monash Univ., Clayton, Victoria (Australia).
SPONS AGENCY Language Australia, Melbourne (Victoria).
ISBN ISBN-1-875578-88-9
PUB DATE 1998-00-00
NOTE 176p.; A CD-ROM accompanies the book.
AVAILABLE FROM Publications and Clearinghouse Manager, Language Australia Ltd., GPO Box 372F, Melbourne, VIC 3001, Australia.
PUB TYPE Guides - Non-Classroom (055) -- Reference Materials - Bibliographies (131)
EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Adult Education; *Computer Assisted Instruction; *Computer Mediated Communication; Computer Networks; *Computer Uses in Education; Educational Resources; Elementary Secondary Education; Independent Study; Information Dissemination; Information Networks; *Instructional Materials; Internet; Listservs; Second Language Instruction; Second Language Learning; *World Wide Web

ABSTRACT

This document is intended for teachers and students who want to use the resources offered on the World Wide Web for second language instruction and learning. It assists in a comprehensive exploration of resources with different types of delivery, content, and level of interaction. The book is free of technical jargon, making insight into the complexity of the task all the easier for the user who is not technically-inclined. Resources include the following: comprehensive lists of URLs in a large number of languages, typically including a wide range of links; comprehensive lists of URLs for a single language, also extensively linked; and sites that focus on a single language. Selection of resources has focused on resources that have the potential to be integrated into existing courses; are instantly usable, in some cases without a teacher; are free or available at a reasonable cost; and are substantial and/or provide useful self-contained activities. Resources are not judged or rated by the author beyond the stated selection criteria; they are merely offered for the reader to pick and choose among. The book is divided into four parts: an introduction; annotated lists of example sites; making sense of the technology; and getting the language right--text input and output. Four appendices are included: useful sites for English-as-a-Second/Foreign-Language; selected links pages for languages in general and specific languages; on-line readings related to MUDs and MOOs; and sites included at the last minute that bear watching. (Contains 66 references.) (KFT)

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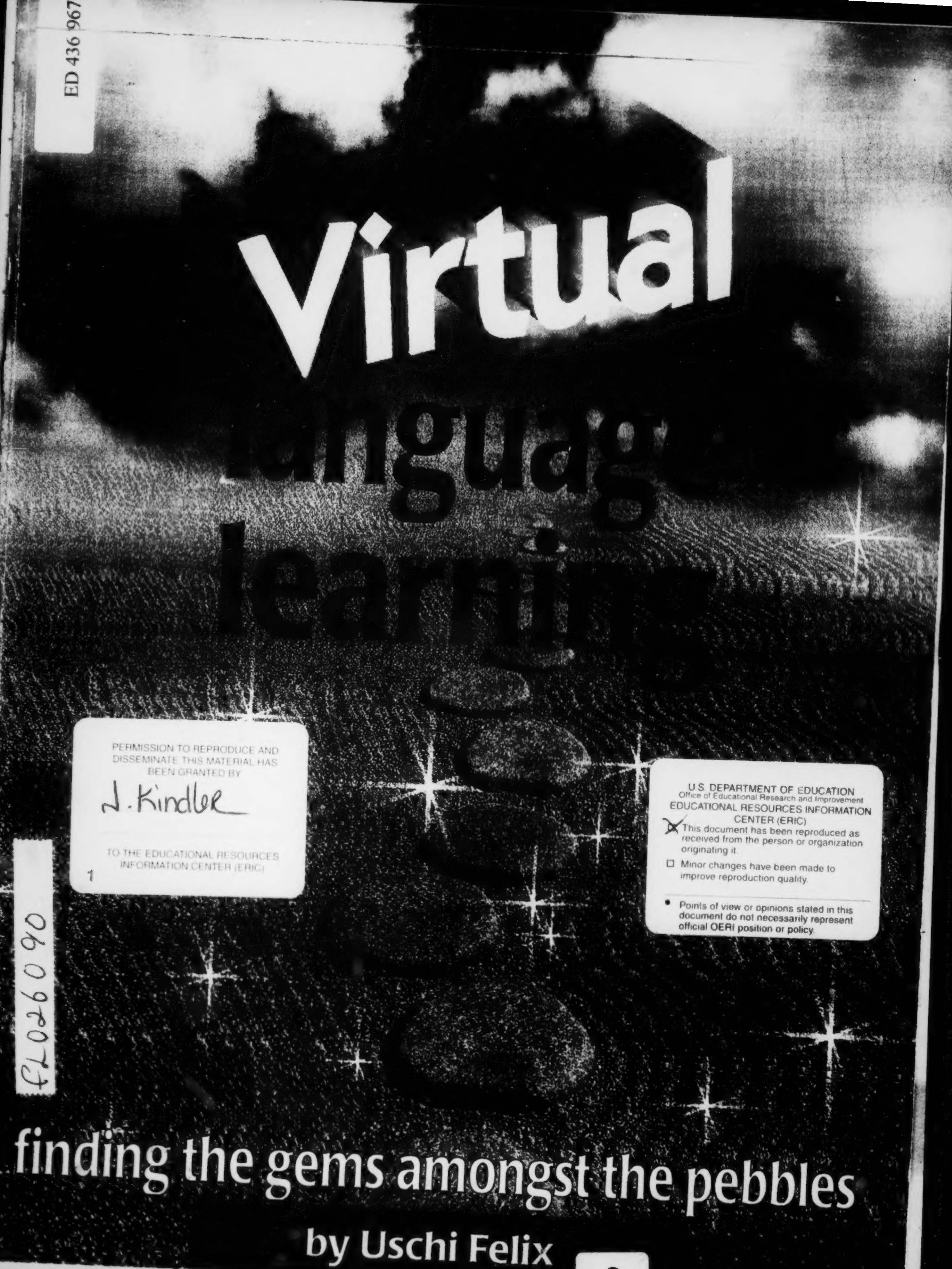

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FL026090

finding the gems amongst the pebbles

by Uschi Felix

Virtual language learning

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published by
Language Australia Ltd.

LANGUAGE
AUSTRALIA

VIRTUAL LANGUAGE LEARNING

FINDING THE GEMS AMONGST THE PEBBLES

National Library of Australia Cataloguing-in-Publication Data
Felix, Uschi.
Virtual language learning: finding the gems amongst the pebbles.

Bibliography.
ISBN 1 875578 88 9.

1. Language and languages - Study and teaching
   - Computer network resources - Directories.
2. Web sites - Directories. I. Title.

025.064180071

Published by Language Australia:
the National Languages and Literacy Institute of Australia Ltd.

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All enquiries in relation to this publication should be addressed to:
Publications and Clearinghouse Manager
Language Australia Ltd
GPO Box 372F
Melbourne, VIC 3001

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Foreword

What became very obvious in the process of conducting this research was the generosity of colleagues who are producing materials on the Web. Without this generosity this book would never have been written and I am immensely grateful to everyone who contributed to it.

The biggest surprise came when I sent out fifteen emails to ask for permission to include excerpts and screen dumps of the best sites from complete strangers. Not only did I receive some answers within less than five minutes from as far as the USA and Luxembourg, but all were positive. What is more, most appeared flattered to be included and gave me unconditional access to their work.

The surprise was especially great since my experiences with copyright permissions were largely coloured by a hideous instance when correspondence to a publisher was answered exclusively by the company's lawyer, lasted several months and to this day has not had a positive outcome!

It appears that the climate and psychology have changed with the technology itself. During the CD-ROM era developments took place largely behind closed doors and no-one had access to the resource before it became marketable. This could take anything up to three years. Web developments, by contrast, often grow on-line, accompanied by email facilities that allow for comments. I was astonished how many excellent resources were out there, unlocked and available for everyone to use. The most interesting observation was that these were often better than their password controlled and marketed counterparts.

My special thanks go to Peter Goelz and Carl Blyth whose generosity in this respect exceeded all expectations. All others are acknowledged elsewhere in the text.

Many thanks to Judith Bothroyd for countless hours of critical searching and to David Askew for endless proofreading and cosmetic changes.

Most of all, I am indebted to Peter Stagg for the valuable input of technical advice, both in writing and in creating the CD-ROM.

This research was supported by Monash University's SMURF research fund.

About This Book

Audience

In preparing this book we had four types of readers in mind:

1. **Teachers who wish to integrate interesting sites and ideas into their curriculum.**

   This book will save many hours of searching by presenting a range of materials classified in categories relevant to the curriculum. Teachers will be able to augment their own resources without expending large amounts of money or time negotiating permission to use the materials with the respective authors. Experience during the writing of the book has been very positive in terms of the content providers' generosity.

2. **Anyone who wishes to refresh or improve a language or get a feel for a new one in the comfort of their own home.**

   We are reluctant to describe this simply as learning a language because it takes a very special person to learn, and especially speak, a language entirely without face-to-face communication. Nonetheless, this book will provide instant access to hundreds of hours of interesting learning materials, often including feedback and opportunities to delve into the authentic environment of the target language culture. Most of these resources can be used free of charge, and the technical information provided in Parts 3 and 4 will help this group to use the materials most effectively.

3. **Teachers who are toying with the idea of developing their own courses or materials on the Web.**

   They will be provided with a large number of example approaches to the task together with an informed summary of technical considerations. However, this book is not intended as a training manual but rather as a first port of call for novice developers. The major rationale here is to discourage the reinvention of the wheel and to encourage global co-operation. In many cases desired materials may already exist, and there may be more to gain from developing complementary resources.

4. **People who wish to learn more about approaches to language teaching, and in general to delivering courses, on the Web.**

   This book allows for a comprehensive exploration of different types of delivery in terms of content and interaction. Language teaching is such a complex task that it lends itself well as a model for Web-based learning, since whatever can be achieved for languages will ultimately be possible in virtually any other subject. Again, the jargon-free technical considerations will provide an insight into the complexity of the task.

Resources surveyed

Types

The materials listed in Part 2 are organised in categories that reflect different approaches to providing learning resources on the Web for languages other than English (LOTEs). Materials for English as a Second Language (ESL) have been included in the main body of the text only where they add an extra dimension to what is otherwise on offer, but a list of useful ESL sites recommended by practitioners in the field is included in Appendix 1.

Sites that can be found fairly generally without difficulty include the following:

1 Comprehensive lists of URLs in a large number of languages, typically including a wide range of links.

2 Comprehensive lists of URLs for a single language, again typically including a wide range of links.

3 Sites that focus on a program for a single language. These, too, may offer links to other sites, but these links are typically selective and targeted and make no attempt to be comprehensive.

The problem endemic to the comprehensive collections in the first two categories is to locate material that is relevant and useful from the bewildering choice on offer. Since these sites may still be of great interest to those who have the time to sort through what is available, a selection of them is listed in Appendix 2. However, the aim of this book is to do the necessary work of selection across a range of languages and to present a range of sites in the third category.

To help clarify what is on offer, these sites are further broken down into various categories ranging from substantial teaching packages incorporating extensive materials to single self-contained interactive exercises and clever ideas. The divisions between categories, however, cannot be absolute and there is inevitably a great deal of overlap between them, so this is a rough, but hopefully useful, division. More detail is given for the most outstanding examples, and screen dumps and excerpts have been included with the permission of the authors. If the collection is dominated to some extent by European languages, it is – unfortunately – because materials are more plentiful in those languages.

While the search took six months, the collection is not fully comprehensive. Apart from anything else, some resources may have been overlooked because they are protected or not registered with search engines. As part of the ongoing search of the Web, Appendix 3 provides a last-minute list of promising developments which it will be useful to monitor. The plan is to provide a brief update of resources every year.

Rationale for selection

Selection has focussed on resources which (a) have the potential to be integrated into existing courses, (b) are instantly usable, in some cases (where adequate on-line feedback is provided) without a teacher, (c) are free or available at a reasonable cost or for credit, and (d) are substantial or provide useful self-contained activities.

We have tried to include the best examples for languages, such as commonly taught European languages, in which the selection was large, and most available examples for languages in which only few resources were found. We wanted to cover a large number of languages in order to present a large variety of approaches regarding method, graphics, structure, feedback and ideas.

While some of these resources may be of greatest value within the context of a host course, all offer many hours of useful work for motivated students anywhere in the world.

Evaluation of resources

Resources were not judged against any other criteria because the aim was to produce a comprehensive picture of what can be done, and allow readers themselves to pick and choose what suits their purpose best. While no attempt is made to tell teachers how to teach or learners how to learn (for tips on pedagogy see Rosen 1996, O'Donnell 1996, Prokop 1996, Hartzog 1996, Arnold 1997, Moore 1998; for descriptions of on-line teaching see Cahill & Catanzaro 1997 and Goodfellow & Lamy 1998), some indication is given of substance and general user-friendliness. For an attempt to evaluate Web resources in the specific case of French, see Lamy 1997.

An effort has been made to include only those materials which promise to be around for some time to come and are frequently updated. Given the volatility of the Web, this is not easy to achieve in every case. There may still be the occasional change of URL or other unforeseeable changes to the resources listed.

Acknowledgments

Authors have generally been acknowledged by name and institution. If either or both are missing, this is because no provision had been made on the Web page to contact the authors or communication facilities were not yet functional.

Technical Information

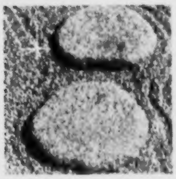
This part of the book provides information that will help users to understand how the Internet works in general, and more specifically to untangle the problems related to teaching and learning a language on the Web. We have anticipated the most frequently asked questions and addressed these in simple non-technical terms. We have explained, for example, why some pages load faster than others, why some media are used infrequently, why some technologies are better suited than others for specific tasks, and which technologies create which levels of interaction. In a rapidly evolving world, we have indicated the way the technology is developing. We have also looked at the crucial problem for language users of reading and writing correct scripts in various languages, not just in stand-alone word processing packages on individual computers, but across the Web in its various forms, and provided up to date information about ways of ensuring that the form of the language is correct and about current developments that promise to provide better support for languages other than English.

About the CD-ROM

We have included the entire content of the book on the accompanying CD-ROM. This will not only allow easy access to all external sites but instant cross-referencing. The plan is to update the CD-ROM every year. For this we would gratefully receive information about relevant resources.

Part 1

Introduction



Part 1 Introduction

The attractions of the Web

A quick browse through the resources listed will make the attractions of the Web quite clear. Some authors (2: A1, C1, C6) spell out the advantages that they see applying to their own materials.

Teachers

For teachers, the Web offers easy access to a large variety of resources. Where these have been produced, as they often are, by professional teams and are supported financially by publishers, they are likely to be of excellent quality, hard to match by individual teachers struggling with limited resources in educational institutions.

In some languages there is so much material available that teachers could almost put together an entire course - and could certainly outsource a significant part of their course - by choosing segments from the categories listed here and adopting the most suitable textbook. Of course, the process of selection, still more of incorporation into an existing program, is not cost-free since it will involve some investment of time, but the returns on the effort are promising and the end result can be a well-rounded teaching approach.

Teachers who are keen to develop their own sites can still use the Web to add elements specific to their course or create resources which are lacking (note the dominance of European languages in some categories) and so avoid the time-wasting process of reinventing the wheel.

Any use of Web material is going to require negotiation with the authors, but some sites are a public resource and there seems anyway to be a remarkable generosity of spirit among the creators.

Students

For students, the Web offers a wide variety of experiences beyond the confines of the curriculum including, most crucially, authentic experiences of the target culture and authentic exchanges with native speakers. Even where the formal curriculum is concerned, there is at least some potential for greater flexibility regarding the time and place of learning: a course wholly or partly on the Web provides constant access to learning materials, and may offer the possibility of communicating with fellow-students and the teacher via e-mail or a discussion group.

Developers

For developers, it is an advantage that very few expensive tools are required to develop materials for the Internet at the most basic level, and even some of the more complex interactive technology comes at a relatively low cost.

Once the materials have been developed, distribution via the Internet is relatively cheap compared to all other forms of distribution. The Internet is itself a distribution and marketing tool. This means that yet another saving can be made when the cost is compared with more traditional distribution and marketing strategies. A big advantage is that all sorts of potential markets and clients can be reached without being specifically targeted in the first place. In addition, the Internet is global. Marketing and distributing multimedia resources locally is already costly enough using traditional means; to achieve the same goal globally by traditional means would require massive funding.

The run-time software - that is, the programs such as browsers, plug-ins and helper applications (3:C,D), which are needed to view the resource - is generally free and easily available to the end users, and browsers provide end users with a familiar interface as they move from one resource to another.

Most material produced for the Internet can be viewed on almost any computer operating system from the more common ones such as Windows and Macintosh to less common systems such as Unix, Linux, Solaris and SunOS. Indeed part or all of most Web sites can be viewed using any system for which a graphical web browser is available.

Problems of the Web

Despite the attractions of the Web, it would be foolish to ignore the drawbacks. Today's Web is a volatile medium. The often used term *World Wide Wait* is not far-fetched if you are working at home with a slow modem connection (3:A3) or trying to access resources in the middle of a server upgrade. On a computer that is not state of the art, it can also be difficult or impossible to download the plug-ins that are a frequent feature of Web sites (3:D), graphics, sound and video can take a long time to load, and response rates can be very slow, especially for resources that predate the use of Real Audio and Real Video (3:C).

The Web is also not immediately user-friendly. To the uninitiated a wonderful resource like the Beginners' German materials at the University of Victoria (2:B1) can look like an impenetrable blob in which it is easy to become lost. The aspects that make the Web an exciting tool for teaching, especially the emphasis on constructivism (Duffy & Cunningham 1996, Geelan 1997, Grandy 1997, Gruba & Lynch 1997, Harper 1997, Jonassen 1994, McMahon 1997, O' Haver 1997, Philips 1995, Philips 1997, Winn 1991), problem solving (Boud & Feletti 1991, Camp 1996, Savery & Duffy 1995, Stepien & Gallagher 1993) and collaborative learning (Debski 1997, Dillenbourg & Schneider 1995, Gremmo & Riley 1995, Lambert & Walker 1996, Levy 1998, Light 1993, Oxford 1997, Renié & Chanier 1995, Warschauer 1996), can create confusion and disorientation. Navigation is also not helped by the volatility of sites: familiar graphics change, resources are added to or restructured, and, at the extreme, sites can move or disappear completely.

In addition, most resources listed here were created for a specific purpose and a specific audience and most importantly for a specific environment which with few exceptions includes face-to-face instruction. It would be foolish to assume that clicking into a Web resource will generate the same opportunities as in a classroom. Materials are not neatly structured as they are in a familiar textbook and the larger the resource and the more complex the links to other relevant sites, the greater the chance of ending up somewhere completely unexpected.

Dealing with the problems

Some of the problems need to be tackled by the developers themselves: what are needed are site maps (2:C4), easy navigation systems (2:B8) or neat explanatory front pages (2: A1). Many sites have already switched to Real Audio (2: C6, B10, C3, C5) and Real Video (2: A2, C6) which offer some advantages, or better still provided sound and video exercises on CD-ROM for speedier access (2:A1, C6, B8). Developers also need to consider whether in each case the use of sound or video adds an important dimension to the learning experience.

In general, however, the user needs to accept that this is a different way of learning and learn to deal with the differences. This is, after all, as it ought to be. There is no point simply reproducing on the Web what can be done in a book. What is needed instead is to exploit the advantages offered by this medium and to reduce its disadvantages. (An interesting discussion of combining CD-ROM and Web developments for this purpose can be found in Burston 1998).

Good hardware, good software and an excellent ISP provider (3:A2) will take care of a large part of the speed problem. As an encouraging example, over the six months that it took to collect these resources in three locations, the Web was too slow to work with only twice, ironically enough once on the occasion when a presentation of the materials was scheduled for colleagues!

The problem of feeling lost in cyberspace usually dissipates with experience. It is quite amazing to watch the ease with which young students navigate complex sites, and the speed at which even the most timid novice adapts to the new and challenging environment. This is not to say that everyone takes to the medium like a duck to water. The fact that quite a number of students and teachers resist the use of technology for a variety of reasons is well known (Felix 97, Gillespie & Mckee 1998, Meunier 1997, Wilss 1997), although most of these observations were made during the previous CD-ROM era.

Advantages over CD-ROM and classroom teaching

More than any previous technology, the Web offers flexibility in delivery. It offers the ability to use materials at home, and an inbuilt efficient mode of communication in the form of direct and instant links by e-mail to the teacher, with all the potential this has to generate prompt oral or written responses. The downside may be the capacity to consume teachers' scarce time, but to balance this, a wide variety of feedback and assessment formats should become available which will save time as well as improve the learning experience.

Similarly, the technology can bring students together, both for work (see 2:D, J, K for co-operative tasks and projects), and for communication, either in real time using chat and MOO sites (2:L, H), via email, or on bulletin boards that provide a forum for the exchange of views.

Most importantly, the world-wide nature of the Web means that extended learning communities are available: instead of students working with the same peer group over a long period of time, the technology opens up the opportunity to work not only with other students, but even with people in countries where the target language is spoken. This can add a wonderful dimension to the learning experience (Felix 1998b).

Any pedagogically sound multimedia program has much to offer, notably large amounts of material on language, literature and culture in the form of tutorials, games, lectures and contextualised exercises using video, audio and text, which students can work with alone or in pairs or larger groups. While all this can be created on CD (albeit not with the unlimited storage capacity of the Web), it is an impossibly tall order to make it all available simultaneously in a classroom.

An important added attraction that the Web offers over the classroom and CD-ROM is the immense richness that it can bring in from the outside authentic world, providing opportunities for truly interactive language teaching at the highest level.

Interactivity that can be expected

During the relatively few years in which educational materials have appeared on the Web, the technology has evolved tremendously in terms of the types of interactivity that can be achieved. The text-based environment, largely used for reading and research purposes, is increasingly being turned into a virtual classroom setting. If we compare a good resource (2:E1) created for the teaching of German some three years ago with more recent ones (2:C6, C5), the advances are obvious. The evolution in languages has roughly been thus: (1) electronic textbooks; (2) sound and to a lesser extent video; (3) exercises with online feedback; (4) interactive tasks; (5) facilities that allow for direct communication with the teacher and others. Naturally this progression does not hold in every case, but what is clear is that the technology has largely driven the pedagogy. In other words, materials have become more interesting in terms of what we would ideally like to do in good language teaching since the advent of CGI, helper applications, plug-ins, Javascript and Java (3:D). The inclusion of Chats and MOOs (3:B7, B9) has further advanced the potential of sound language teaching in a virtual environment.

In terms of language pedagogy three levels of interactivity in the Web environment can be identified. It is important to note that our focus here is predominantly on online activities and not on material that is used or produced in face-to-face settings. (For the latter see Warschauer 1995, Debski 1997, Felix 1998a; for a quick online demonstration of interactivity in technical terms see Pecoy 1997 and Goodwin-Jones 1998).

1. Point and click activities

The lowest level is represented by point and click activities. These are not rich in themselves, but many are now located in settings that offer an increasing richness of culture and language. In the Vietnamese materials (2:B8), for example, beginning students can click into explanatory sections on Vietnamese geography, economy, history, people, politics and culture, all illustrated with maps and photographs. They can switch to language exercises, practise pronunciation, read simple poetry, attempt translations, analyse culture-specific behaviour in videos and visit relevant authentic sites in the country.

While this particular course was created to provide a specifically structured virtual classroom for beginning students, other resources have a more open approach in terms of level of proficiency and navigation. The beginners' German course at Victoria (2:B1), for example, includes a vast variety of materials, by virtue of strategic links to other sites, that students at any level can profit from. A simple point and click will immerse an intermediate student in authentic German literature forums, the Website of the hottest German popgroup (including song clips) or German film noir such as Murnau's Nosferatu. Similarly, an advanced student can enter the world of real-time German news on televison.

2. Resolution of information gap

The next level involves some form of information gap which has to be resolved using language as a communicative tool, with the learners having a limited influence over the outcome (Foot 1994). Virtually all the sites given in section 2:D, J and K include such activities. In Adesso (2:D1), for example, students are asked to collect a variety of information from linked sites in order to answer questions, fill in charts and prepare their own materials, such as writing a newspaper advertisement for a famous café in Italy. While most of these are presented on proformas to print out and deliver to the teacher, others can be submitted electronically. They range from self-contained short tasks as in the German exercise on Bayern (2:J1) to an extensive series of problem solving activities as in the Chinese Long Walk (2:K1).

Other examples of this type of interactvity can be produced when students use Chat and MOO sites (Truna 1995a, Fanderclai 1995). One example is the treasure hunt idea by Truna (1995b) in which a variety of objects are left in different locations of the MOO for students to discover; another the topic related discussions suggested by Ferguson (L1).

3. Experiential learning

The highest level offers a range of experiential learning (Wills 1994), involving users (1) in a kind of quest with a meaningful goal, (2) in real interaction in authentic or virtual true to life settings or (3) in the production of the materials themselves.

The more sophisticated activities given in sections 2: D, J and K give students the opportunity for goal-oriented learning. Two examples are the collaborative task based on researching Indonesian newspapers for ideas to use in the creation of a class home page (2:K2) and finding vacation accommodation through authentic real estate sites in France (2:A1).

MOO and Chat sites located in the target language country (2:H2, H4, L2) offer ample opportunity for authentic interaction. When testing the Planet

Talk Chat site in Germany (2:L2), for example, I got a severe grilling from one of the participants about whether I was really in Australia, and had to give information on animals, population and geography to prove my bona fides! Even at a less threatening level, students have to discover where people are, who they are and why they are there, and then engage in meaningful interaction if they are to keep their respondents interested. A wonderful aspect of this environment is the possibility of communicating through assumed identities which can have a liberating and empowering effect (Turkle 1995).

It is becoming more and more common for students to become involved in creating materials as part of their learning experience. These activities might include producing the advertisement mentioned above, writing or completing stories which are posted back on the Web (2: B6), creating a cyber community through collaborative narratives (2: L3), or designing tangible products such as the greeting card in German (2: I6).

An impressive example of this kind of interaction, encompassing all three aspects of experiential learning, can be found in a site produced for the Singapore Tourist Promotion Board (2:I7). One of the original features was a competition with two trips to Singapore as the prize. While the prize is no longer available, the activity of producing a collage of Singapore still is and the potential for using this resource in an intermediate ESL class is enormous. Without any need for programming knowledge, users are led through a wonderfully varied set of written and visual instructions, manipulating beautifully produced images and text, changing sizes, positions and layers to create a collage representing their own idea of Singapore. The program automatically produces a first class version in terms of resolution. Clicking on the chosen images in the collage produces a personal tour of Singapore by opening relevant text windows with their descriptions of historical, cultural or geographical sites.

In summary, the Web is an exciting new tool for language teaching. While it is not without problems, it can add a valuable dimension to face to face teaching at one end, or offer the potential for delivering a whole virtual program, and individual users should be able to find elements suitable for their own circumstances.

Teachers and learners will have to make their own choices about how to use the Web, but my own ideal would be to incorporate all the following elements into a single program: a good text-book; face-to-face teaching; interactive tasks using the Web; contextualised practice of structures on the Web and/or on CD-ROM; meaningful activities based on video and sound on CD-ROM; and Web-based interchange with authentic speech communities.

Part 2

Annotated List of Example Sites

Part 2 Annotated List of Example Sites

A. Integrated materials

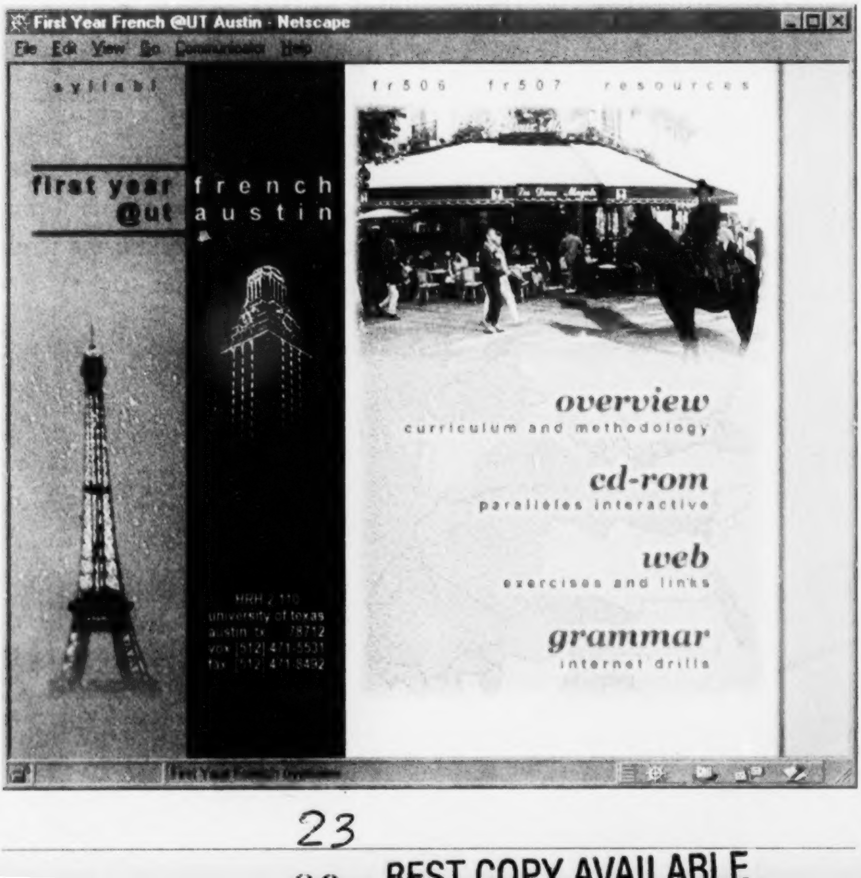
The sites listed here differ from the ones in the following section in that the Web-based materials are part of a larger package which includes other texts, CD-ROMs or video resources. They differ from similar packages listed in section C in that they are still freely available.

French

A1) first year french@ut austin
http://www.lamc.utexas.edu/fr/home.html

This is an excellent example of a well designed combination of face-to-face teaching and computer assisted learning materials, co-ordinated by Carl Blyth at the University of Texas. The Web materials consist of extensive grammar exercises and task-based interactive projects, neatly constructed around single topics. Its most outstanding feature is the clarity of approach and user-friendliness. The following pages (highly recommended as model front pages) speak for themselves:

Fig. A1.1


First Year French @UT Austin - Netscape
File Edit View Go Communicator Help
syllabi
first year @ut
french austin
fr506 fr507 resources

overview
curriculum and methodology

cd-rom
paralleles interactive

web
exercises and links

grammar
internet drills

HRH 2.110
university of texas
austin tx 78712
vox [512] 471-5531
fax [512] 471-8492

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Quoted From the Web A1.1:

UT Austin First Year French Overview

Bienvenue! Welcome to First Year French at the University of Texas at Austin. Our program offers a learner-centred model of foreign language instruction, integrated by means of innovative computer technology. We use technology to teach traditional linguistic skills and to expand awareness of francophone cultures.

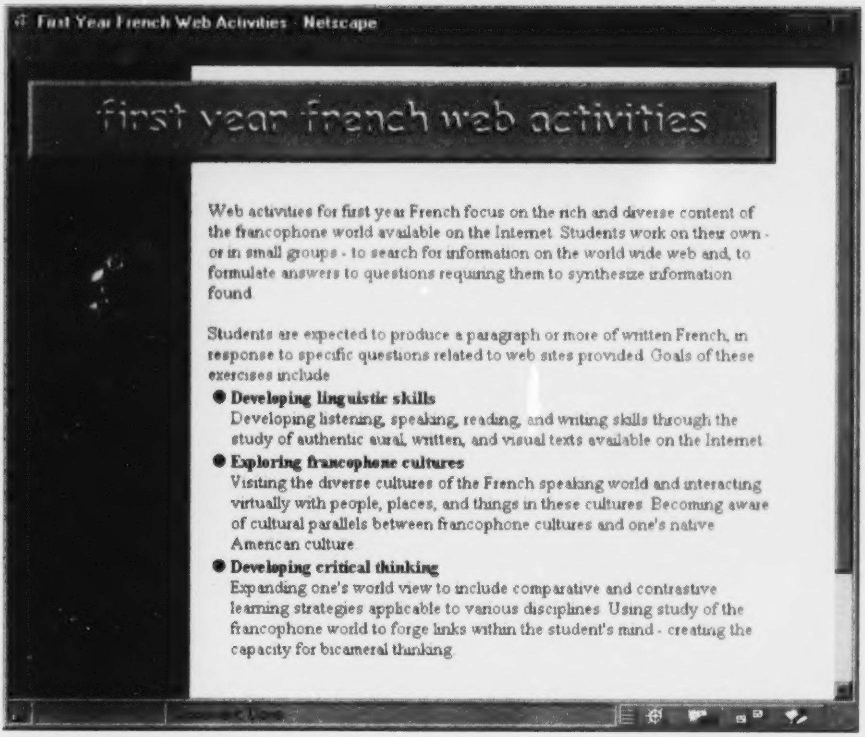
Among components of our computer based curriculum is a CD-ROM which richly augments traditional learning with interactive audio and visual texts. This CD was produced and tested at the University of Texas as a collaborative effort of the Department of French and Italian, Liberal Arts Media Center, and the College of Liberal Arts.

Internet-based learning plays a large role in First Year French curriculum. Web activities, focused on the virtual francophone world, teach students to develop methods of gleaning information, as well as integrating discoveries into meaningful language production. Web grammar exercises offer unlimited opportunity for mastery of fundamental elements – at a time and place of a student's choosing.

These components, along with with classroom communicative activities, offer rich opportunities for students to develop linguistic skills, enhance cultural awareness, and extend critical thinking skills – which will serve them throughout their university education, and beyond.

Innovative goals of First Year French include enhancing the student experience, while simultaneously **discovering** the ideal components of a successful CAI program through classroom testing and research. Ours is an exciting learning experience for faculty and students alike.

Fig. A1.2



First Year French Web Activities - Netscape

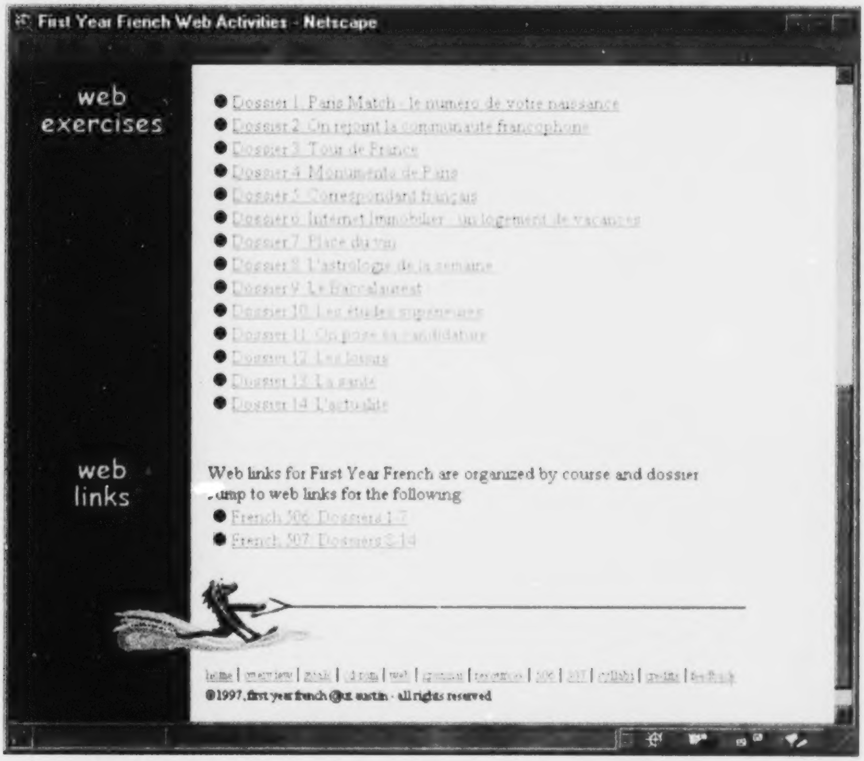
first year french web activities

Web activities for first year French focus on the rich and diverse content of the francophone world available on the Internet. Students work on their own - or in small groups - to search for information on the world wide web and, to formulate answers to questions requiring them to synthesize information found.

Students are expected to produce a paragraph or more of written French, in response to specific questions related to web sites provided. Goals of these exercises include

- **Developing linguistic skills**
  Developing listening, speaking, reading, and writing skills through the study of authentic aural, written, and visual texts available on the Internet.
- **Exploring francophone cultures**
  Visiting the diverse cultures of the French speaking world and interacting virtually with people, places, and things in these cultures. Becoming aware of cultural parallels between francophone cultures and one's native American culture.
- **Developing critical thinking**
  Expanding one's world view to include comparative and contrastive learning strategies applicable to various disciplines. Using study of the francophone world to forge links within the student's mind - creating the capacity for bicameral thinking.

Fig. A1.3



First Year French Web Activities - Netscape

- Dossier 1. Paris Match - le numéro de votre naissance
- Dossier 2. On rejoint la communauté francophone
- Dossier 3. Tour de France
- Dossier 4. Monuments de Paris
- Dossier 5. Correspondant français
- Dossier 6. Internet Immobilier - un logement de vacances
- Dossier 7. Place du vin
- Dossier 8. L'astrologie de la semaine
- Dossier 9. Le Baccalauréat
- Dossier 10. Les études supérieures
- Dossier 11. On pose sa candidature
- Dossier 12. Les loisirs
- Dossier 13. La santé
- Dossier 14. L'actualité

Web links for First Year French are organized by course and dossier. Jump to web links for the following

- French 506: Dossiers 1-7
- French 507: Dossiers 8-14

home | overview | goals | cd-rom | web | grammar | resources | 506 | 507 | syllabi | credits | feedback

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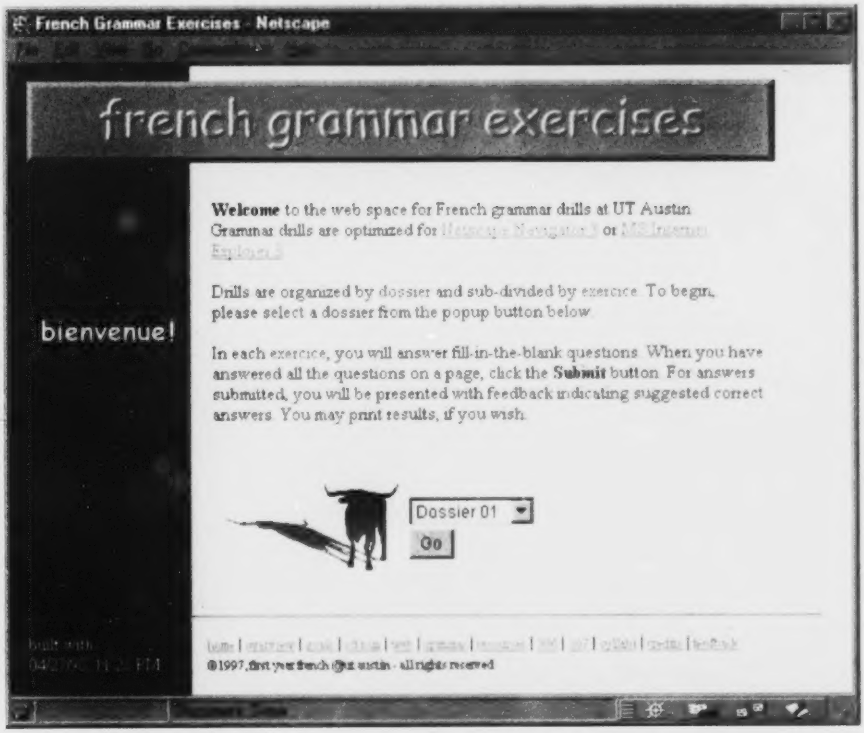
Quoted from the Web A1.2

parallèles interactive CD

parallèles interactive, a multimedia program to accompany the introductory French textbook *Parallèles: Communication et culture* (Wendy Allen and Nicole Fouletier-Smith, Prentice Hall, 1995), was developed and tested at the University of Texas. Unlike many foreign language CDs developed as stand alone products, Parallèles Interactive has been carefully integrated with the text's presentation of vocabulary, grammar, and culture to facilitate a student's self-paced study and review. Parallèles Interactive contains approximately 170 interactive computer screens, covering the fourteen dossiers or chapters of the textbook.

parallèles interactive
disc

Fig. A1.4



Welcome to the web space for French grammar drills at UT Austin. Grammar drills are optimized for Netscape Navigator 3 or MS Internet Explorer 3.

Drills are organized by dossier and sub-divided by exercice. To begin, please select a dossier from the popup button below.

In each exercice, you will answer fill-in-the-blank questions. When you have answered all the questions on a page, click the **Submit** button. For answers submitted, you will be presented with feedback indicating suggested correct answers. You may print results, if you wish.

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Italian

A2) ITALIA 2000

http://www.italia-2000.com/unitsOfStudyFrame.html

This site offers materials for students of all levels and contains video clips with full transcripts, a glossary and a series of interesting interactive exercises based on the content of the videos. It is to date the only site which uses large amounts of video as the central teaching resource. At the moment the materials can be used by anyone (a password will be given on request) but the intention is to link the course to classes taught at Oxford in which case some services such as tutorial support will be restricted to registered users.

The developers are negotiating publication of the entire site. It is possible that as a result the site will move or require fees to be paid but it is well worth following up via the homepage at: *http://ital2000.aber.ac.uk/*

The site is part of a larger project, sponsored by the European Commission which aims to provide multimedia packages for teaching and learning Italian at intermediate and advanced levels. The materials are based on news bulletins and current affairs reports supplied by the Italian television networks RAI and TELETNA. The project is co-ordinated by Marina di Stefano-Cocuzza at the University of Wales - Cardiff with numerous contributors from other institutions, most notably Aberystwyth and Oxford.

Italia 2000 consists of sets of thematic materials on 12 topics.
Each unit consists of :

1. *video clips lasting each between 2 and 4 minutes;*
2. *an exercise book;*
3. *(CALL) Computer Assisted Language Learning activities related to each topic;*
4. *a CD-Rom based on a selection of video-clips from some of the topics;*
5. *an audiocassette with the complete audio track of the video programme;*
6. *transcripts.*

Portuguese

A3) De Tudo Um Pouco

http://www.arts.gla.ac.uk/PortLang/

This is the Web version of a fully integrated Course book and CD-Rom for beginner's European Portuguese, produced under the British Teaching & Learning in Technology Programme and Glasgow University TILT group. It comprises 10 episodes with spoken texts, exercises, grammar and vocabulary – it will eventually include interactive exercises but for the moment model answers are being provided as feedback.

The course forms part of a wider group of materials, Glasgow University's Portuguese Site (http://www.arts.gla.ac.uk/PortLang/), which provides: 1) course notes and bibliography on selected literature from Portugal, Brazil and Portuguese Africa; 2) examples of student essays and other activities; 3) an experimental resource bank of teaching materials; 4) a Portuguese commercial glossary; 5) an extensive list of Web links to most of the Portuguese-speaking countries.

B. Substantial materials/whole subjects

This section contains sites which provide comprehensive materials which are either integrated into the host course or offered on a stand-alone basis. Teaching and practice materials, including on-line feedback, are so far freely accessible, although for some registration may be required in the future. Where sites offer interaction with the tutor or submission of assignments, access is naturally restricted to enrolled students. (An indication of how fast things change on the Web is the fact that *Deutsch online* was moved to section C as the book went to press because of its introduction of fees. To add to the confusion, it was then taken off the Web because of copyright problems and is being offered again from January 1999.)

German

B1) **German for beginners**
http://web.uvic.ca/german/149/

This is an impressive collection of materials, developed by Peter Gölz and colleagues, for students in the beginners German course at the University of Victoria in Canada. It contains a large variety of on-line exercises and activities, including Real Audio clips of songs and texts and a Mush with its own novice tour. A large number of links, including one to Real Video clips of a German news program, and another to streamed videos of German films, are also featured.

Indonesian

B2) **SEAsite**
http://www.seasite.niu.edu/

This is an extensive site developed by Jim Henry at Northern Illinois University to provide Web materials for Indonesian, Thai, Tagalog, Vietnamese and Burmese. At the moment the Indonesian materials are the most sophisticated but also still under development. They include interactive exercises, such as drop and drag exercises, fill-ins or whole sentences, reading texts with a dictionary facility and multiple choice questions, a colour quiz and picture-based vocabulary lessons, all presented with beautiful graphics. There is also a conversation section for aural comprehension and links to news, to the art and culture of Indonesia, and to other miscellaneous areas.

French

B3) **Online Phonetics course**
http://www.unil.ch/ling/phonetique/api-eng.html

This is a comprehensive course, "designed to teach the fundamentals of phonetics and mastery of the International Phonetic Alphabet (IPA)", developed by Christophe Pythoud at the University of Lausanne. The original French version has now also been translated into English. At the moment the course does not include sound or feedback but the following features are promised in "The Glorious Future":

> *acoustic representations of the sounds described:*
> *spectra, sonagrams, etc.;*
> *a chapter covering the basics of acoustic phonetics; but if you can't wait, here are two appetizers:*
> *Speech Analysis Tutorial;*
> *CSLU Spectrogram Reading Home Page;*
> *transcription exercises;*
> *a bulletin board allowing the exchange of messages between teachers and students.*

B4) **Civilisation Française**
http://www.cortland.edu/www/flteach/civ/
This site, developed by Marie Ponterio, offers 18 illustrated chapters on aspects of French culture. Web sites relevant to each topic are linked, and appropriate films and books suggested. Audio is built in, and video is promised. The approach is to provide text – continuous or broken up into separate sentences – covering the topic, with gaps that the reader is invited to fill in. Immediate feedback is provided for each question and there is a facility to hear the answer or sometimes the complete sentence in French. There are also opportunities to write more extensive French.

Italian

B5) **Italian Diction**
http://www.geocities.com/Broadway/2713/index.html

This is a text-based course on diction entirely in Italian, developed by Sergio Chiorino, Silvia Derossi and Fabrizio Giaccone. It is still under development and provides no on-line feedback but might be worth following up.

B6) Pagina Italiana

http://www.hopcross.schnet.edu.au/~lezioni/welcome.html

This is a very user-friendly personal site, created by Valentina Dosti at Hoppers Crossing Secondary College (Australia). It contains steadily growing lessons for beginners, including pictures of Australian animals and vignettes with an Australian flavour. Students can submit completed exercises, ranging from multiple choice to writing extended texts, on-line. A nice touch is that stories written by students are continuously published on the page.

B7) Quattro passi nell'italiano

http://www.unive.it/~cli/quattro/uno.htm

This is an Italian course (no level specified), developed by Maddalena Angelino, Marina Biral, Roberto Dolci and Valentina Zangrando at the University of Venice. It is decribed as "un'esperienza di apprendimento dell'italiano a distanza" and the exercises suggest that it is meant for beginners. The texts, however, are often at a much higher level. This, together with the exclusive use of Italian (which is excellent, of course, for the students *in situ*), means that it may be a bit challenging for complete beginners and best suited for students who already know some Italian. The site offers an entrance test that takes the form of some grammar questions and a Cloze test from Calvino, designed to establish the user's level of competence. The course includes a large number of materials, beautifully presented with intuitive navigation icons. At the moment the student feedback is limited to looking up answers, although email links are being established for submitting assignments. The developers are carrying out extensive evaluations on the course which will hopefully be integrated into further developments. The questionnaire can be found on-line in both Italian and English.

Vietnamese

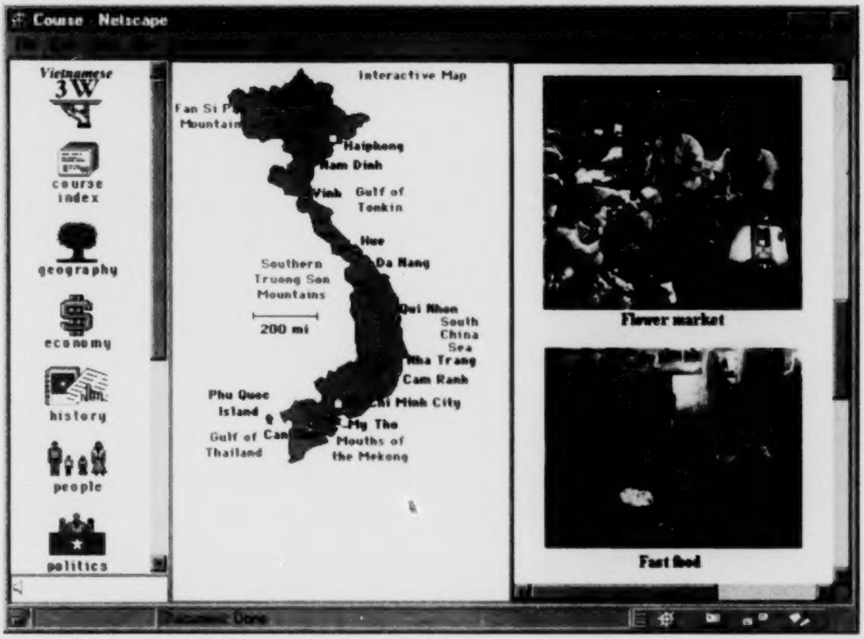
B8) Beginners Vietnamese

http://www.arts.monash.edu.au/viet/

This is an interactive site for beginners Vietnamese, integrated into the beginners course taught at Monash University in Melbourne. The project was co-ordinated by Uschi Felix and materials developed by Lou Winklemann and Quynh-Du Ton-That. It includes sounds for pronunciation exercises, dialogues for grammar exercises, video clips with exercises and contextualised grammar notes. Immediate feedback is given for a variety of untimed and timed exercises and practice tests. Other features include:

timed and password restricted tests to be submitted electronically; Vietnamese-English-Vietnamese Glossary; detailed information on Vietnam and its culture including links to relevant sites in Vietnam; a bulletin board; and two chat programs. The first of the latter is meant for simple communication exercises between students or between lecturer and students in which the text disappears after the site is closed. In the second, which is used mainly for structured co-operative writing exercises, all written text is retained so that the lecturer is able to give feedback to the students. Materials are also provided on CD-ROM.

Fig. B8.1


Course · Netscape
Vietnamese
3W
course index
geography
economy
history
people
politics
Interactive Map
Fan Si P
Mountain
Haiphong
Nam Dinh
Vinh
Gulf of Tonkin
Hue
Da Nang
Southern Truong Son Mountains
200 mi
Qui Nhon
South China Sea
Nha Trang
Cam Ranh
Chi Minh City
Phu Quoc Island
Gulf of Thailand
Can
My Tho
Mouths of the Mekong
Flower market
Fast food
Document: Done

Korean

B9) Korean3

http://www.arts.monash.edu.au/korean/korean3/

This site, developed by Young-A Cho, In-Jung Cho and Peter Stagg, provides course materials for second and third year level Korean, integrated into the Korean course at Monash University in Melbourne. The beautifully presented materials are structured around ten topics, and each has a Korean-English glossary, background socio-cultural information, grammar explanations, authentic texts and TV news clips (sound with still photo). The topic-oriented design with components of rich support materials enable students to study materials that cannot easily be presented in class. It also allows not only the developers but other teachers using the course to easily add further authentic texts, TV news clips, and new topics.

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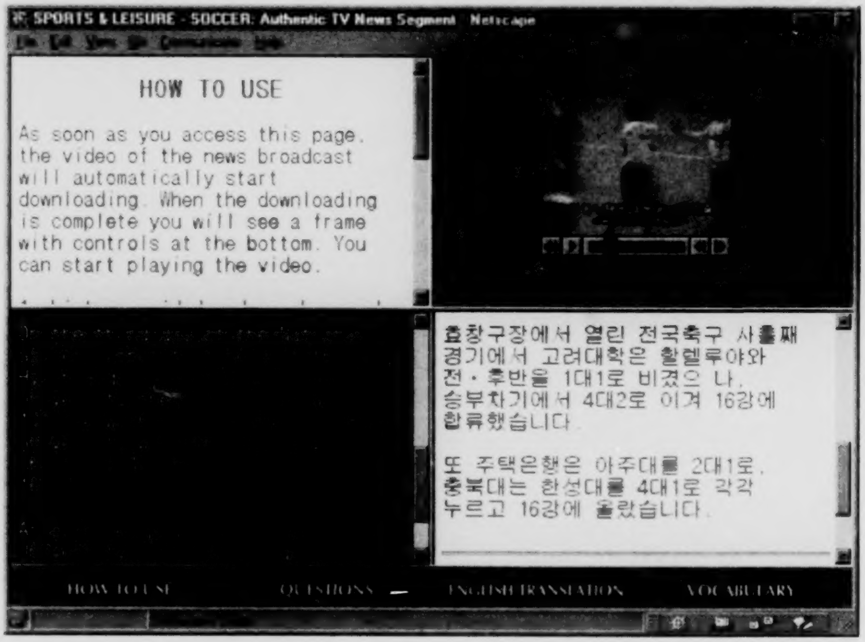
Fig. B9.1


SPORTS & LEISURE - SOCCER: Authentic TV News Segment - Netscape
HOW TO USE
QUESTIONS
ENGLISH TRANSLATION
VOCABULARY

HOW TO USE

As soon as you access this page, the video of the news broadcast will automatically start downloading. When the downloading is complete you will see a frame with controls at the bottom. You can start playing the video.

효창구장에서 열린 전국축구 사흘째
경기에서 고려대학은 할렐루야와
전·후반을 1대1로 비겼으나,
승부차기에서 4대2로 이겨 16강에
합류했습니다.

또 주택은행은 아주대를 2대1로,
충북대는 한성대를 4대1로 각각
누르고 16강에 올랐습니다.

Chinese

B10) Chinese2 Australia

http://www.arts.monash.edu.au/asian_lang_stud/chinese/chinese2/

Chinese 2 Australia was developed by Robert Irving and In-Jung Cho with additional content input from Jianjun Urwin and Lijun Bi at Monash University in Melbourne. This site provides reading and listening materials for second year (university) level students of Chinese who are able to recognise approximately five hundred Chinese characters. The materials are designed to supplement a conventional course delivered in face-to-face mode. They are suitable for self-study or for delivery in a supervised CALL class and have been fully integrated into the Monash Intermediate Chinese curriculum. The course consists of eight units on everyday themes. The passages in the reading section are all set in a contemporary Australian context and are designed to develop students' wider reading comprehension ability through true/false, multiple choice and short answer questions with on-line feedback. Recognising the difficulties in developing reading proficiency in a character-based language, the authors have provided an audio version of each passage as well as comprehensive vocabulary notes. The listening component, designed to improve students' listening comprehension ability, is organised around the same eight topics. Each unit comprises notes, listening comprehension questions and an extension exercise based on the material contained in the unit.

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Hebrew

B11) Hebrew: A living language
http://www.walla.co.il/

This popular commercial site is designed for students with no or a rudimentary knowledge of Hebrew. It offers lessons on the alphabet, basic grammar, and useful words (with audio) and provides a link to a dictionary. It includes a story in hypertext, a phrase of the week (with archive), and a *Hebrew Talk* feature. You will need Hebrew fonts installed to view any of these pages.

Japanese

B12) Japanese Online
http://www.japanese-online.com/

This is an extensive award-winning site provided free by Pacific Software Publishing, Inc. in Bellevue, USA. It contains introductory language lessons with dialogues, vocabulary, grammar and culture modules, sound files, a bulletin board, a dictionary and Japanese maths lessons. From lesson six onwards, Japanese script (Hiragana) is required. Its feedback structures are not very sophisticated yet and some sections are more extensive than others but seeing that the site is actively under construction it is well worth following up.

B13) The Japanese Language & Culture Distance Learning Course
http://www.peachstar.gatech.edu/irasshai/

Georgia Public Broadcasting has produced this site which features curriculum enrichment materials for a beginner's and second year course in Japanese taught by distance education. Materials include: Hiragana and Katakana reference charts with audio and video and writing practice sheets; on-line practice activities; launch pad lessons which use the Internet to explore the culture of Japan; and other writing activities. This looks to be a very comprehensive site, using satellite TV programs and weekly telephone hook-ups to Japanese native speakers. It also features a large number of links to other Japanese sites.

B14) The Japanese Tutor
http://www.missouri.edu/~c563382/OtherSites/Beginning.html

This site, created by David Reed, is still under development and only a few of the advertised lessons are accessible at this stage. There are good supplementary materials including katakana and hiragana stroke order demonstrations that include sound. There is also a quite extensive vocabulary section. The site promises lots more to come.

Modern Greek

B15) Modern Greek as a Foreign Language – Advanced Level

http://www.eng.auth.gr/learn/index.htm

This site, designed, developed and maintained by Fanny Galatsopoulou and Chrysa Mantatzidou, as a part of their M.Sc. thesis in Foreign Language Teaching, includes a course for advanced learners of Modern Greek (both as a foreign and as a second language). It consists mainly of short integrated reading and writing activities to give students around the world the opportunity to use and improve their Greek while surfing the net. Some tasks are designed for autonomous learning, others demand collaboration with the developers since they are based on interaction, and all of them promote meaningful Greek communication and a better understanding of Greek culture and society. All the texts used as teaching materials are authentic with some attention given to structures of grammar and syntax. The course is planned especially for individual learners (advanced level) and anyone learning Greek who knows how to edit e-mail and browse the net is welcome: "You can attend the course and take as much time as you want, but please do not send any answers to activities if you are not pretty sure that you are going to complete the whole course or at least in such case send us a brief e-mail explaining your reasons for leaving us (dropouts can also be beneficial to us). Why don't you join us!"

C. Substantial materials – protected

Sites listed here offer on-line courses with varying degrees of substance in terms of content and feedback structures. They are available either to enrolled students at the host institution or on a fee-paying basis. (During the writing of this book, fees have changed several times.)

Chinese

C1) Mandarin on-line
http://wwli.com/languages/zhongwen/chinese.html

This is a Mandarin course for beginners developed and maintained by Brian King in Hong Kong. It uses a discussion board for student contact and offers a practice site to try before enrolling. It has an effective interface for attracting potential students, the front page displaying all characters to be learnt in sequence. Registration is US $39, $75 and $99 for 30, 60 or 90 days. In all cases there are 12 lessons to work through. Completing 12 lessons in 90 days will, it is claimed, produce a vocabulary of 500 words and a passive knowledge of about the same number of characters and active production of about 100 characters. The site uses embedded Real Audio.

There is a tutoring system for radicals: it is 13 pages long, and students have to learn to recognise all the characters on one page (there is a quiz to test this) before they can go on to the next page. The system keeps track of students' performance, so the work can be done over several sessions.

C2) Graduate Certificate in Modern Standard Chinese
http://www.arts.unimelb.edu.au/Dept/J_and_C/default.html

Bridges To China is a Web-based intermediate level course suitable for tertiary students, with one Listening Comprehension CD and one video CD ROM for developing Speaking skills. It will be offered for credit by the Melbourne Institute for Asian Languages and Studies at the University of Melbourne from March 1999 to February 2000. Materials will be accessible late 1998. The course is comprehensive and includes development in reading, writing, listening and speaking using newly created texts and activities. Chinese society is met through study of 6 films from contemporary Chinese cinema and an optional, structured 2-week Study Tour to Beijing. Features of the course are its focus on learnability of material, range of text types introduced, and attention to assisting students to develop their mastery of self-expression, discourse coherence and register control. A further feature is the amount and nature of interactivity in a Web-based course.

Project Director: Jane Orton, University of Melbourne; Instructional Design: Jane Orton & Liu Mingchen, University of Melbourne; Isabel Tasker, Murdoch University; Doug Smith and Mary Farquhar, Griffith University. Interface Design: Ric Canale and colleagues, University of Melbourne.

Note that this site is under development and the URL may change.

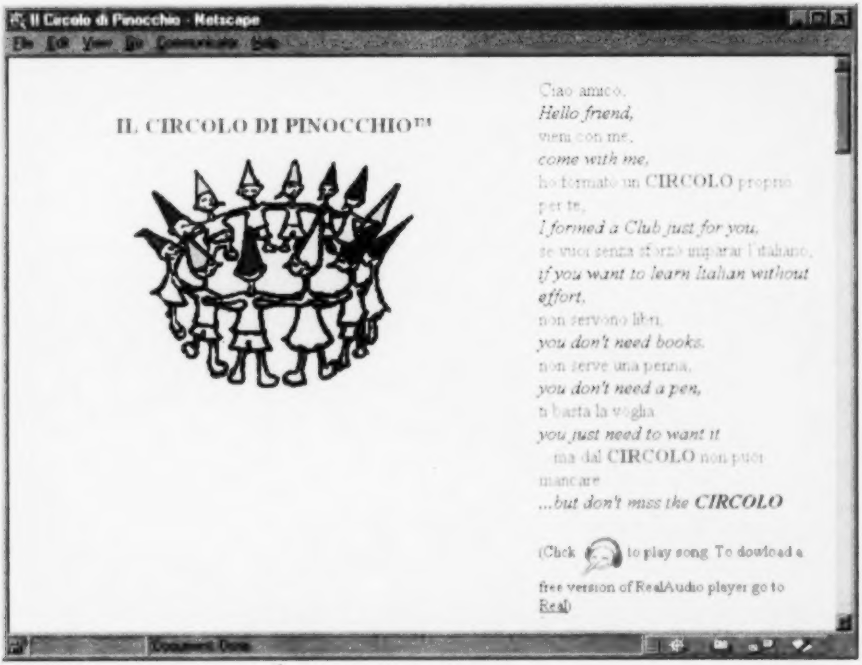
Italian

C3) **Cyberitalian**

http://cyberitalian.com

This is an extensive site, including a beginners and intermediate course using cheerful Pinocchio graphics. The discourse throughout is friendly and unthreatening: "Did all that grammar scare you? Relax...". The site is very sophisticated in terms of offering a choice of interactive activities (message board and chat according to level), cultural tidbits, extensive exercises with feedback (including scored exams), interactive exercises along the lines of those described in section D below, a gallery of articles about Italy in both English and Italian and links to other relevant sites. It is described as a "meeting place for people wishing to understand Italian culture and language". The site uses Real Audio as well as WAV and is the only site so far that includes use of a recording device (downloadable). With this students can record their voice and compare it to the original (a discussion of the use of speech recognition devices in language learning software can be found in Felix 1998a).

Fig. C3.1


Il Circolo di Pinocchio - Netscape
File Edit View Go Communicator Help
Document: Done

IL CIRCOLO DI PINOCCHIO™

Ciao amico,
Hello friend,
vieni con me,
come with me,
ho formato un CIRCOLO proprio per te,
I formed a Club just for you.
se vuoi senza sforzo imparar l'italiano,
if you want to learn Italian without effort,
non servono libri,
you don't need books.
non serve una penna,
you don't need a pen,
ti basta la voglia
you just need to want it
ma dal CIRCOLO non puoi mancare
*...but don't miss the **CIRCOLO***

(Click to play song To dowload a free version of RealAudio player go to Real)

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Lessons 1 and 2 of the beginner level and lesson 12 of the intermediate level are provided for trial before registration. Costs are very reasonable compared to other resources of this (and lesser) quality. US $14.95 will cover one year membership of the Circolo di Pinocchio and access to the beginners or intermediate levels course costs another US $19.95 (per level). Advanced level course materials are under development.

Principal developers are Maura Garau and Paolo Vacchina in New York with extensive input from others. Cyberitalian is registered as a company.

C4) **Italiano Funzionale**

http://oliva.history.denison.edu/doc/corsi/italiano.funzionale/index.html

This is another site all in Italian still under development. While it may not be accessible to unenrolled students, it is an interesting model for attempting a communicative/functional approach via the Web. It is beautifully presented graphically. At the moment only the introduction is provided in English, although the option of translations for other instructions is foreshadowed. It is described as a "Functional Spoken Italian Course", structured around the four areas of starting and finishing the communicative act, asking and responding, socialising, and expressing opinions and feelings. It was designed and will be taught by Maurizio Oliva and Gretchen Mathis.

> *"This course concentrates on the communicative aspect of the Italian language and is geared towards students at different levels of proficiency, especially towards those who speak English.*
>
> *Interaction is created through telnet and is password protected. The course is taught in HTML format and is distributed through the VRML frame of the Centro di Studi Giovanni XXIII, thus allowing the students to work in an environment that possesses the same communicative characteristics of a real classroom. The course is divided into five parts (one part each week) and is taught completely in Italian. The navigational instructions are visual and the textual instructions are in Italian with the option to view them in English as well.*
>
> *A similar course on writing [by Nanda Cremascoli] is also foreshadowed."*

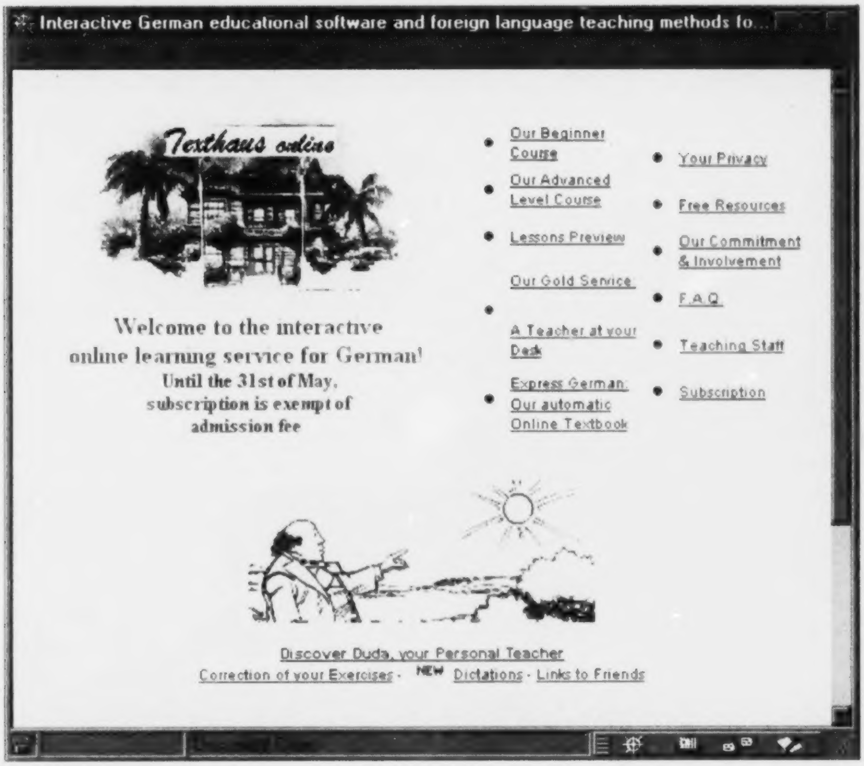
German

C5) Texthaus

http://www.texthaus.com/

This course offers 20 lessons for beginners or advanced students, presented in a relaxed, personal way following a friendly cartoon character called Duda. It includes a variety of interesting exercises with sound and feedback, including dictations, and an on-line grammar similar to the ones described in C2. The first two lessons are offered free. Subscriptions cost US $59 for five lessons at either beginners or advanced level, or $199 for the full program of 20 lessons. The course was developed by a team at Bocconi University and the Catholic University of Milan with Ernst Kretschmer responsible for the didactic co-ordination. It is taught by Dimitri Michael Ikonomu and marketed by Danio Maldussi.

Fig. C5.1

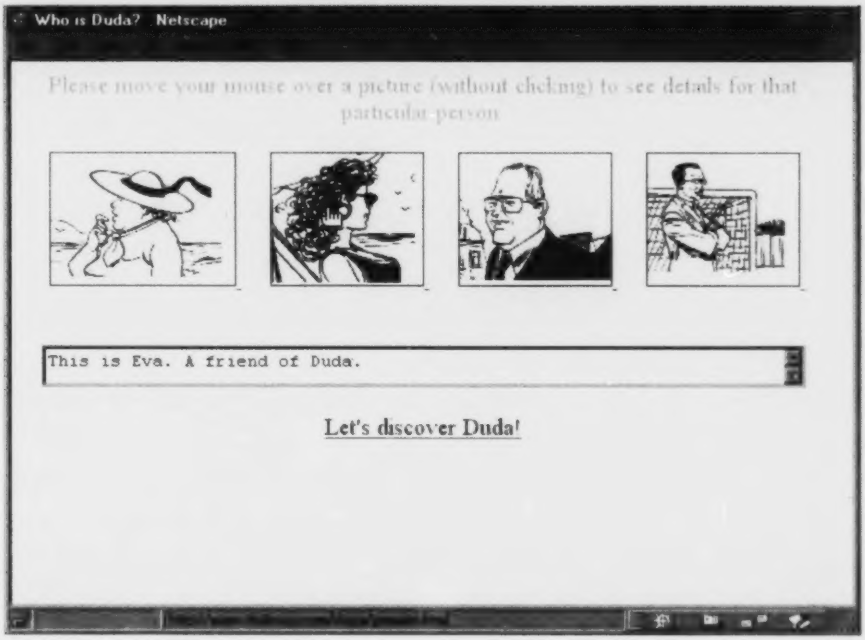


Interactive German educational software and foreign language teaching methods fo...

Welcome to the interactive online learning service for German!
Until the 31st of May, subscription is exempt of admission fee

Texthaus online
Our Beginner Course
Our Advanced Level Course
Lessons Preview
Our Gold Service
A Teacher at your Desk
Express German: Our automatic Online Textbook
Your Privacy
Free Resources
Our Commitment & Involvement
F.A.Q.
Teaching Staff
Subscription
Discover Duda, your Personal Teacher
Correction of your Exercises · NEW Dictations · Links to Friends

Fig. C5.2

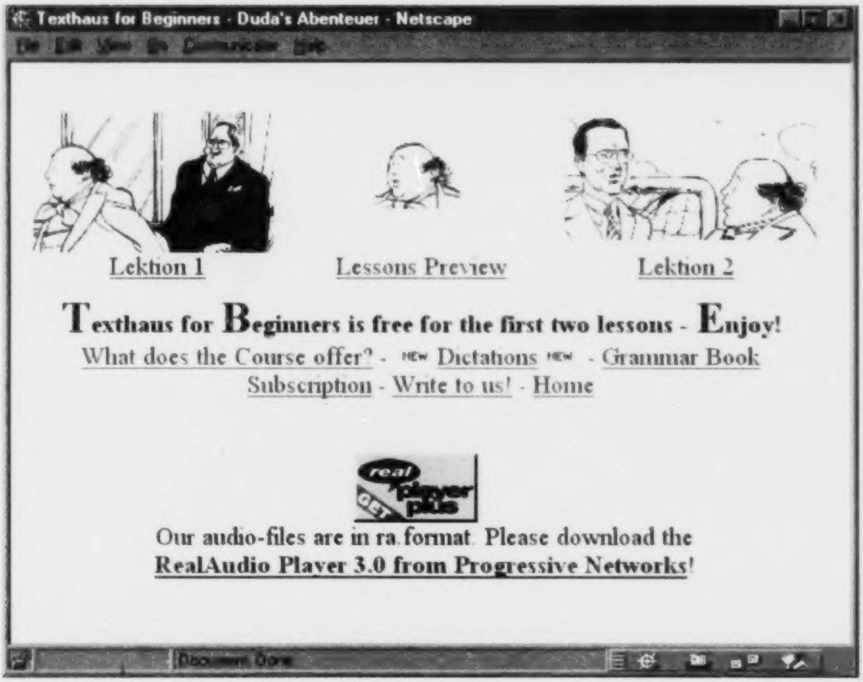

Who is Duda? - Netscape

Please move your mouse over a picture (without clicking) to see details for that particular person

This is Eva. A friend of Duda.

Let's discover Duda!

Fig. C5.3


Texthaus for Beginners - Duda's Abenteuer - Netscape
File Edit View Go Communicator Help
Lektion 1
Lessons Preview
Lektion 2
real player plus GET
Document: Done

Texthaus for Beginners is free for the first two lessons - Enjoy!

What does the Course offer? - NEW Dictations NEW - Grammar Book

Subscription - Write to us! - Home

Our audio-files are in ra.format. Please download the **RealAudio Player 3.0 from Progressive Networks!**

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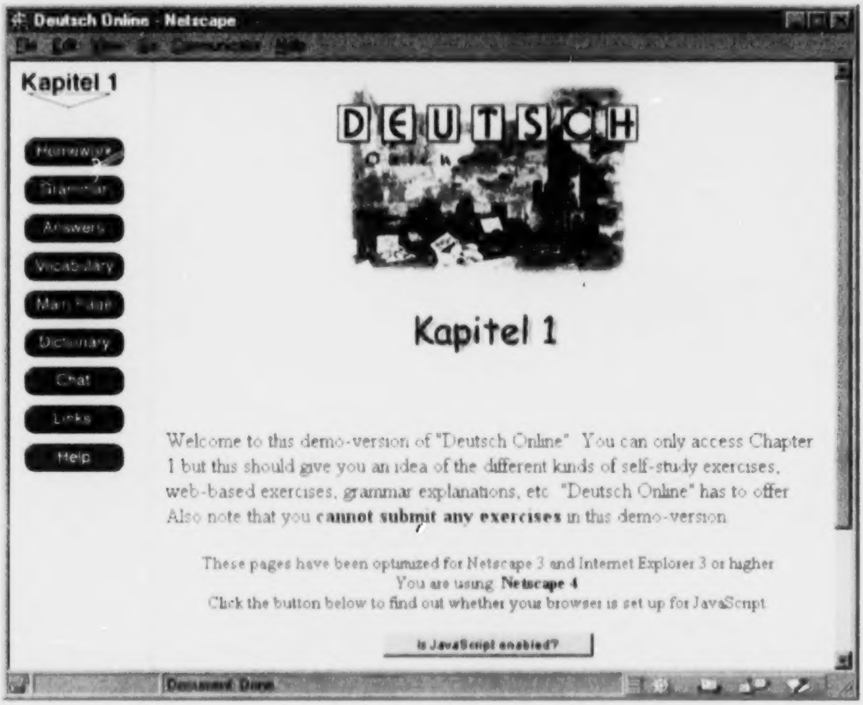
C6) Deutsch online

http://web.uvic.ca/german/dol-demo/

This course evolved out of *German for Beginners* (B1) and retains links to it (including the Mush), but is especially designed to be used for distance education. It is more sophisticated than B1 in the feedback that it provides to exercises. At the moment it is still under development but it promises to be a pedagogically sound approach to teaching a language at a distance. The Web materials represent part of a larger package (like the resources in section A) but are no longer freely available which is why we list them here. There is a demo version of chapter one available for trial. Costs range from $339 to $538 (Canadian) for a 14 week course, depending on whether or not the course is taken for credit. (The credit option is restricted to Uni Vic students.) The price covers access to the site, guidance and feedback from the instructor, the text-book, a workbook, audio tapes, a CD and a chat line allowing access to the instructor and to other students. More detailed information from Peter Gölz follows:

Fig. C6.1


Deutsch Online - Netscape
Kapitel 1
DEUTSCH
Online
Homework
Grammar
Answers
Vocabulary
Main Page
Dictionary
Chat
Links
Help
Kapitel 1
Is JavaScript enabled?
Document: Done

Welcome to this demo-version of "Deutsch Online" You can only access Chapter 1 but this should give you an idea of the different kinds of self-study exercises, web-based exercises, grammar explanations, etc "Deutsch Online" has to offer Also note that you **cannot submit any exercises** in this demo-version

These pages have been optimized for Netscape 3 and Internet Explorer 3 or higher
You are using **Netscape 4**
Click the button below to find out whether your browser is set up for JavaScript

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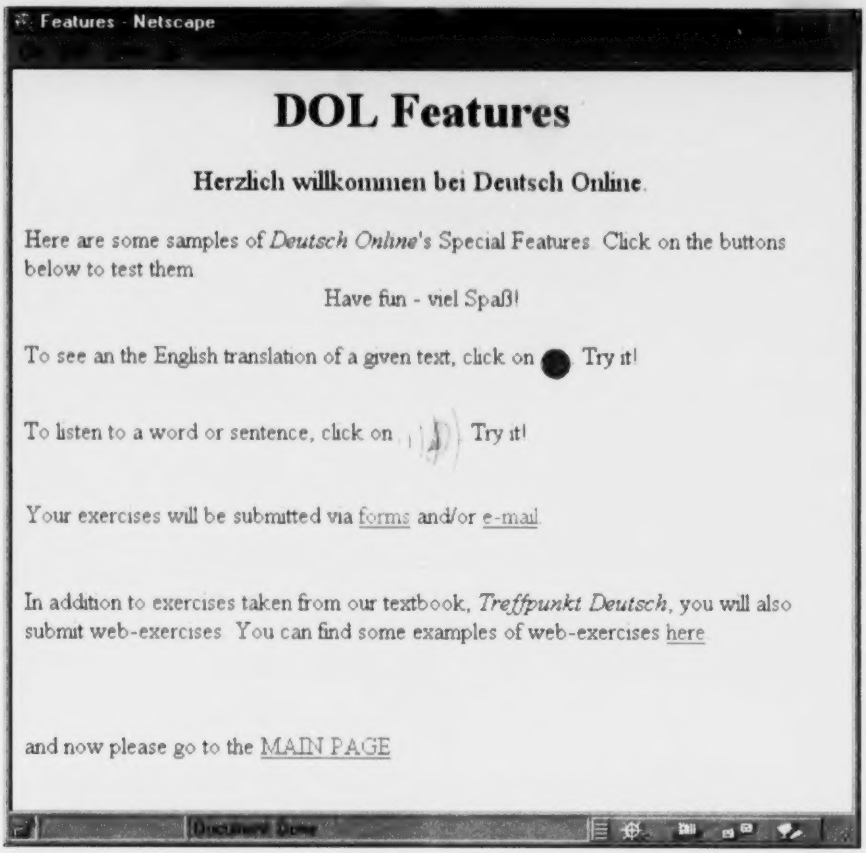
Fig. C6.2



DOL Features

Herzlich willkommen bei Deutsch Online.

Here are some samples of *Deutsch Online*'s Special Features. Click on the buttons below to test them.

Have fun - viel Spaß!

To see an the English translation of a given text, click on ● Try it!

To listen to a word or sentence, click on 🔊 Try it!

Your exercises will be submitted via forms and/or e-mail.

In addition to exercises taken from our textbook, *Treffpunkt Deutsch*, you will also submit web-exercises. You can find some examples of web-exercises here.

and now please go to the MAIN PAGE

Quoted from the Web C6.1

Advantages of *Deutsch Online* compared to other distance education courses

Student-teacher communication

- immediate feedback from instructor via e-mail
- immediate submission of homework – no two-week wait for assignments submitted and returned by regular mail
- students can submit texts, images, and audio
- the instructor will meet students at a pre-arranged time in the MUSH (=Multi-User Shared Habitat) – a virtual world that will be used in conjunction with the material on the Web.

Course materials

- up-to-date exercises and information (from German, Austria, and Switzerland)
- up-to-date audio and video clips (in RealAudio and as .au files)
- ease of use: instead of having to look for certain phrases or words on an audio tape, students have easy and immediate access to various

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sound files (from the alphabet to short stories, from poems to fairy tales, from music to news, etc.)
- links of interest (appropriate for this level of language learning)
- *Deutsch On-line* is always available in the latest edition
- students can expand and improve *Deutsch Online*
- with the help of pre-selected links to relevant sites, students can access a vast 'library' of information without having to purchase more textbooks

Student-student communication
- students will be part of a nicknames list, which allows them to send and receive e-mail from the whole class
- students can meet on an individual basis, as small groups, or as the whole class
- students can work on group projects, no matter where the individual student is located
- students can meet people from all over the world

What kind of exercises will we use?
text:
- self-testing with workbook and with forms
- multiple choice forms
- computer-generated immediate feedback for forms
- submit and receive passwords for correct answers
- exchange exercises/peer evaluations

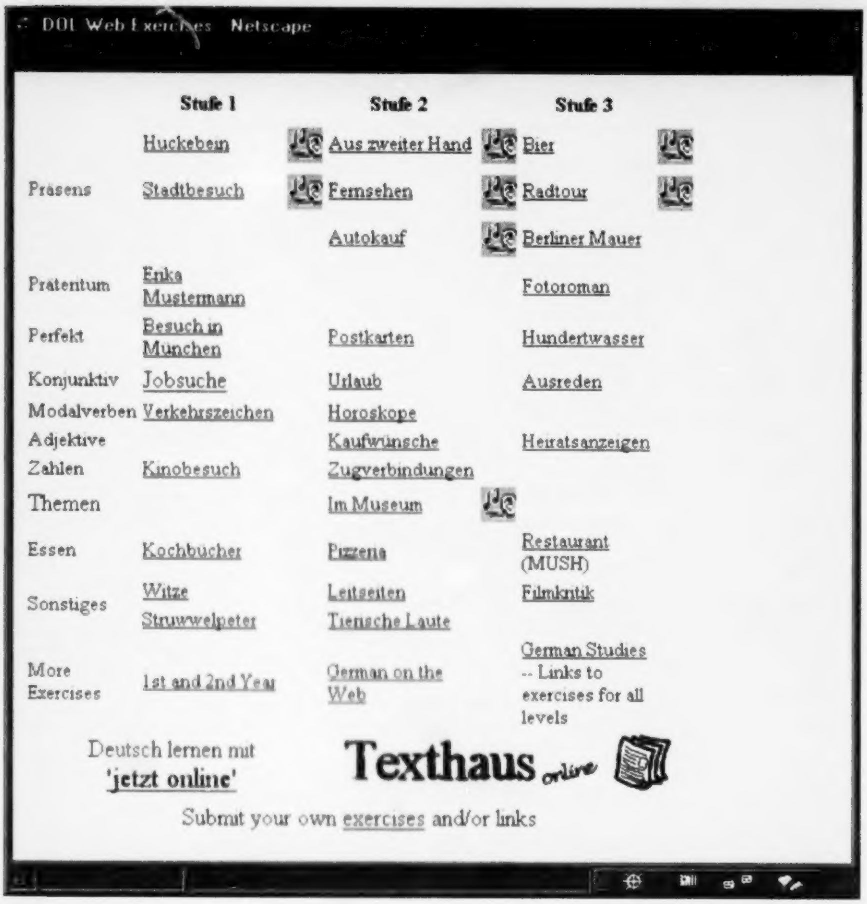
audio exercises:
- on tape
- on the DOL-Site
- audio-sites in Germany-speaking countries

numerous images and video clips

What kind of computer hardware and software do you need?
In terms of computer hardware, one can never have enough ;-) Since you're reading this text on the Web, you do have net-access and a Web-browser (or 'lynx'). Ideally, you also have a microphone connected to your computer and a sound-card. DOL-Software is available on CD-ROM and on disks, for Macintosh and Windows. You do need a tape deck to listen to the sound samples and exercises from the "Treffpunkt Deutsch" tapes which you'll receive upon registration.

Parts of this course is based on my 'German for Beginners'-Site but *Deutsch Online* is a complete course-package. It has more examples, exercises, grammar explanations and cultural exercises, an extensive searchable vocabulary list, and numerous sound samples.

Fig. C6.3



	Stufe 1	Stufe 2	Stufe 3
	Huckebein	Aus zweiter Hand	Bier
Prasens	Stadtbesuch	Fernsehen	Radtour
		Autokauf	Berliner Mauer
Prateritum	Erika Mustermann		Fotoroman
Perfekt	Besuch in Munchen	Postkarten	Hundertwasser
Konjunktiv	Jobsuche	Urlaub	Ausreden
Modalverben	Verkehrszeichen	Horoskope	
Adjektive		Kaufwünsche	Heiratsanzeigen
Zahlen	Kinobesuch	Zugverbindungen	
Themen		Im Museum	
Essen	Kochbucher	Pizzeria	Restaurant (MUSH)
Sonstiges	Witze Struwwelpeter	Leitseiten Tierische Laute	Filmkritik
More Exercises	1st and 2nd Year	German on the Web	German Studies -- Links to exercises for all levels

Deutsch lernen mit
'jetzt online'

Texthaus online

Submit your own exercises and/or links

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D. Activities/Exercises/Tasks based on textbook or magazine

Sites in this section provide a large range of interactive activities related to a specific textbook or magazine. Students are typically referred to relevant linked sites in order to gather information that can then be used for answering questions, filling in gaps, or writing small sections of text. They are on the whole beautifully presented, often with proformas for students to print out and to work on either on their own or with partners.

Italian

D1) **Adesso**
http://adesso.heinle.com/

This site is one of several in various languages (see D3, D4, D9 below), sponsored by Heinle & Heinle. It provides interesting interactive tasks integrated with the 18 chapters of the textbook *Adesso 2/e,* for single users or groups. The activities which are beautifully presented, using friendly instructions (at first in English, then in Italian), were developed by Elvira Di Fabio and Michael Hemment at Harvard University.

Fig. D1.1

Welcome to ADESSO! - Netscape

Welcome to the ADESSO! Web site

by Marcel Danesi

Internet Activities by:
Elvira G. Di Fabio, Ph.D.
Harvard University
Michael J. Hemment
Harvard University

Fig. D1.2

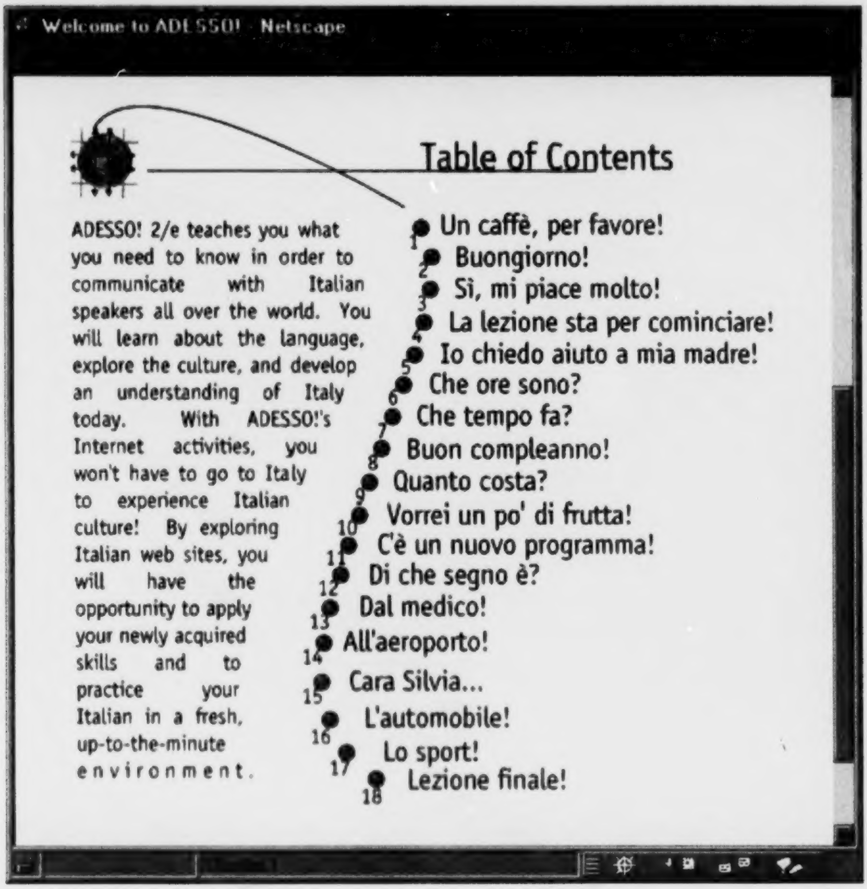
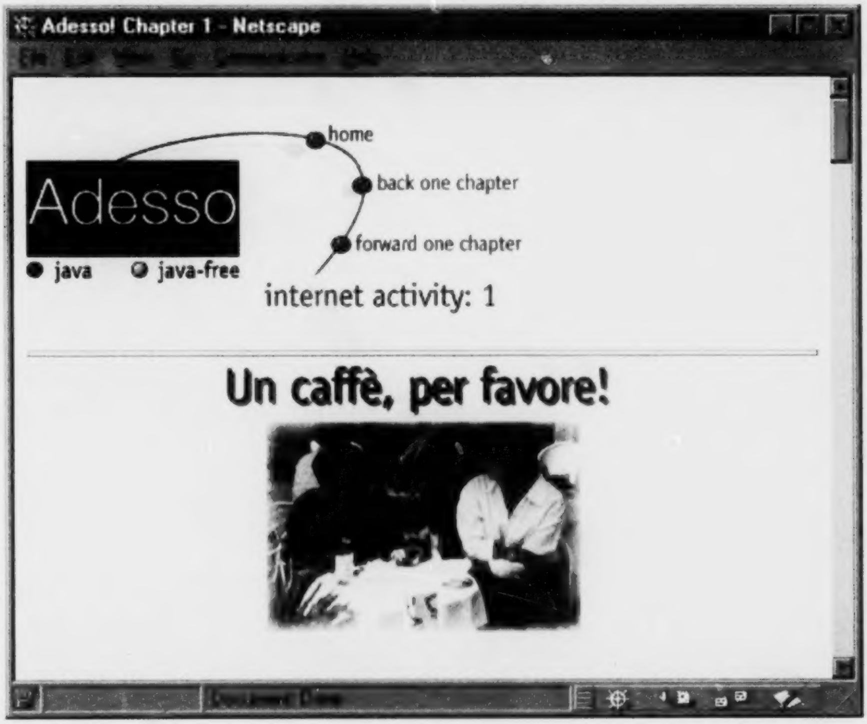


Table of Contents

ADESSO! 2/e teaches you what you need to know in order to communicate with Italian speakers all over the world. You will learn about the language, explore the culture, and develop an understanding of Italy today. With ADESSO!'s Internet activities, you won't have to go to Italy to experience Italian culture! By exploring Italian web sites, you will have the opportunity to apply your newly acquired skills and to practice your Italian in a fresh, up-to-the-minute environment.

1 Un caffè, per favore!
2 Buongiorno!
3 Sì, mi piace molto!
4 La lezione sta per cominciare!
5 Io chiedo aiuto a mia madre!
6 Che ore sono?
7 Che tempo fa?
8 Buon compleanno!
9 Quanto costa?
10 Vorrei un po' di frutta!
11 C'è un nuovo programma!
12 Di che segno è?
13 Dal medico!
14 All'aeroporto!
15 Cara Silvia...
16 L'automobile!
17 Lo sport!
18 Lezione finale!

Fig. D1.3



home

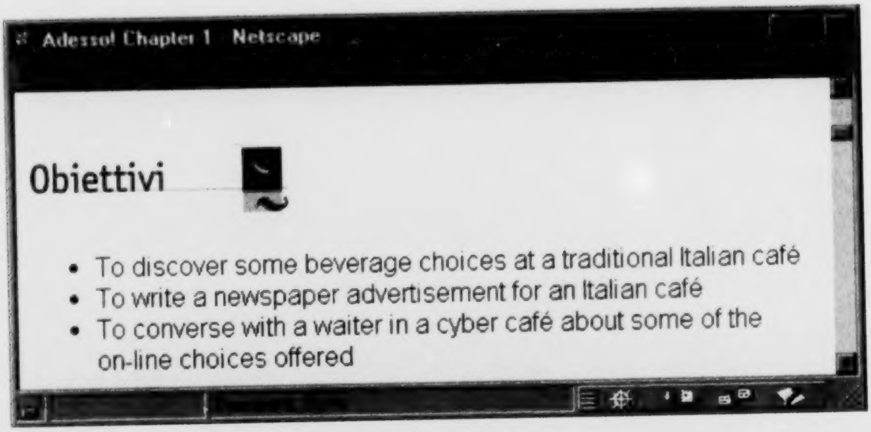
back one chapter

forward one chapter

internet activity: 1

Un caffè, per favore!

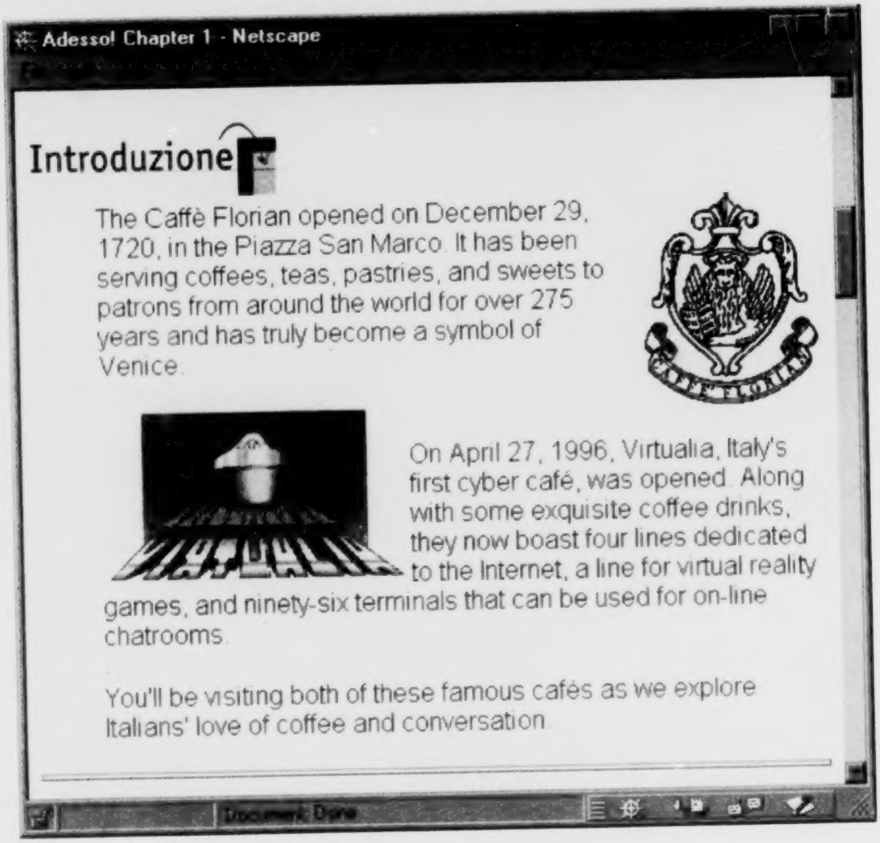
Fig. D1.4



Obiettivi

- To discover some beverage choices at a traditional Italian café
- To write a newspaper advertisement for an Italian café
- To converse with a waiter in a cyber café about some of the on-line choices offered

Fig. D1.5



Introduzione

The Caffè Florian opened on December 29, 1720, in the Piazza San Marco. It has been serving coffees, teas, pastries, and sweets to patrons from around the world for over 275 years and has truly become a symbol of Venice.

On April 27, 1996, Virtualia, Italy's first cyber café, was opened. Along with some exquisite coffee drinks, they now boast four lines dedicated to the Internet, a line for virtual reality games, and ninety-six terminals that can be used for on-line chatrooms.

You'll be visiting both of these famous cafés as we explore Italians' love of coffee and conversation.

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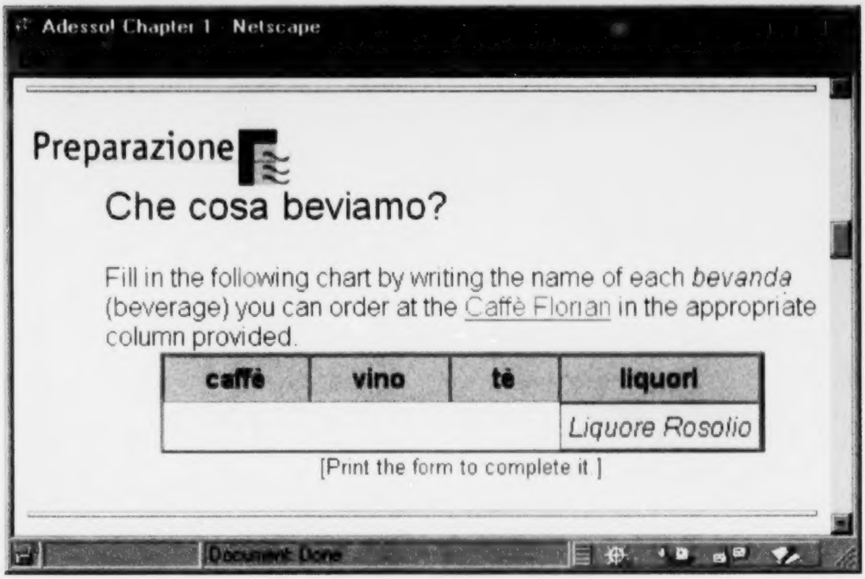
Fig. D1.6


Adesso! Chapter 1 - Netscape
Document: Done

Preparazione

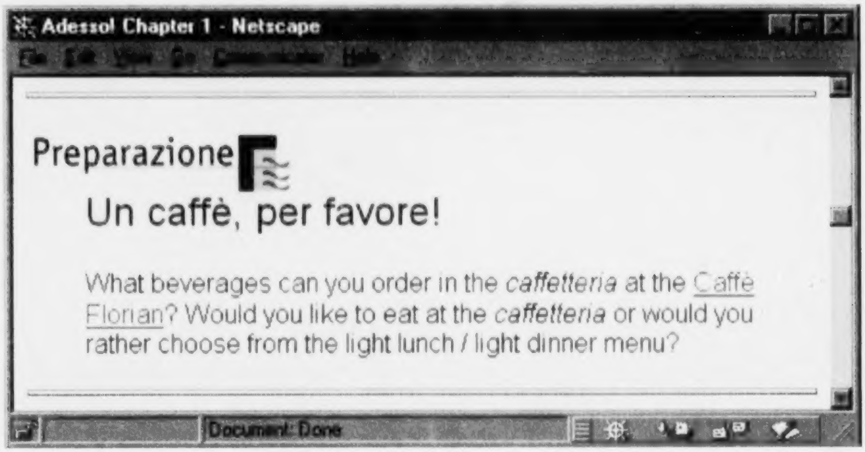
Che cosa beviamo?

Fill in the following chart by writing the name of each *bevanda* (beverage) you can order at the Caffè Florian in the appropriate column provided.

caffè	vino	tè	liquori
			Liquore Rosolio

[Print the form to complete it.]

Fig. D1.7

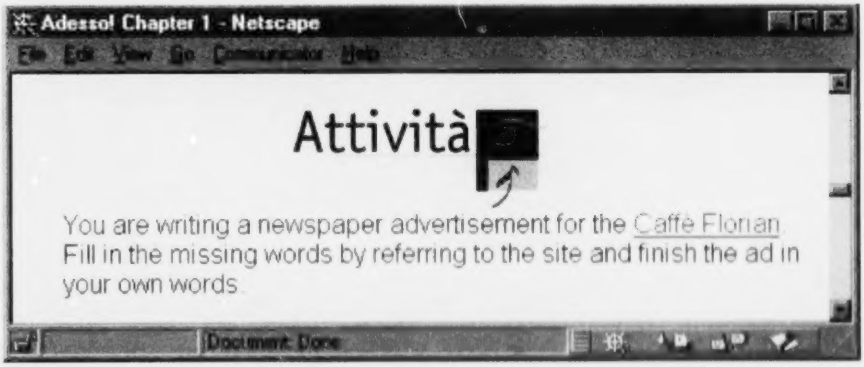

Adesso! Chapter 1 - Netscape
File Edit View Go Communicator Help
Document: Done

Preparazione

Un caffè, per favore!

What beverages can you order in the *caffetteria* at the Caffè Florian? Would you like to eat at the *caffetteria* or would you rather choose from the light lunch / light dinner menu?

Fig. D1.8


Adesso! Chapter 1 - Netscape
File Edit View Go Communicator Help
Document: Done

Attività

You are writing a newspaper advertisement for the Caffè Florian. Fill in the missing words by referring to the site and finish the ad in your own words.

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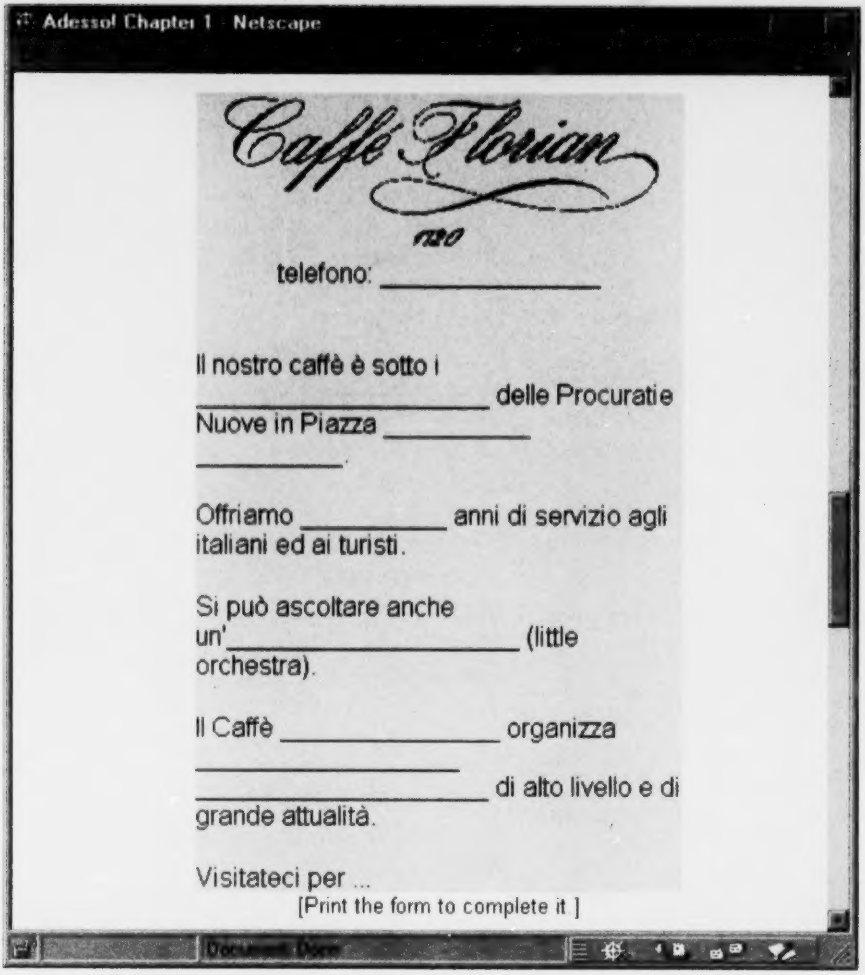
Fig. D1.9


Adesso! Chapter 1 - Netscape
Caffè Florian
1720
Document: Done

telefono: ______________

Il nostro caffè è sotto i ____________________ delle Procuratie Nuove in Piazza __________ __________.

Offriamo __________ anni di servizio agli italiani ed ai turisti.

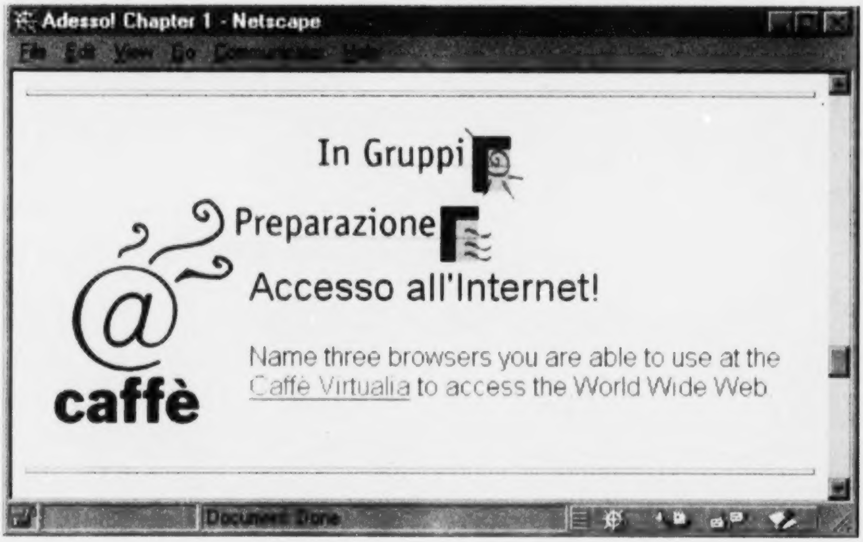
Si può ascoltare anche un'____________________ (little orchestra).

Il Caffè ______________ organizza __________________ ____________________ di alto livello e di grande attualità.

Visitateci per ...

[Print the form to complete it.]

Fig. D1.10


Adesso! Chapter 1 - Netscape
File Edit View Go Communicator Help
In Gruppi
Preparazione
@ caffè
Document: Done

Accesso all'Internet!

Name three browsers you are able to use at the Caffè Virtualia to access the World Wide Web.

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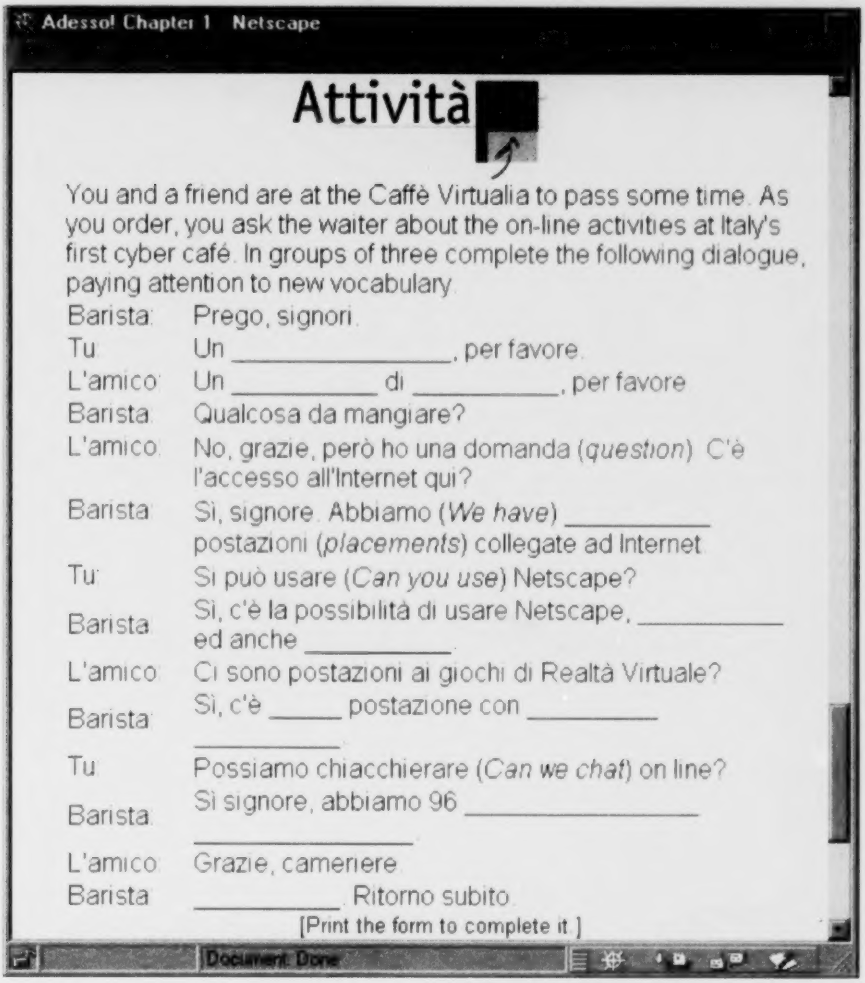
Fig. D1.11



Attività

You and a friend are at the Caffè Virtualia to pass some time. As you order, you ask the waiter about the on-line activities at Italy's first cyber café. In groups of three complete the following dialogue, paying attention to new vocabulary.

Barista:	Prego, signori.
Tu:	Un ______________, per favore.
L'amico:	Un __________ di __________, per favore.
Barista:	Qualcosa da mangiare?
L'amico:	No, grazie, però ho una domanda (*question*). C'è l'accesso all'Internet qui?
Barista:	Sì, signore. Abbiamo (*We have*) __________ postazioni (*placements*) collegate ad Internet.
Tu:	Si può usare (*Can you use*) Netscape?
Barista:	Sì, c'è la possibilità di usare Netscape, __________ ed anche __________.
L'amico:	Ci sono postazioni ai giochi di Realtà Virtuale?
Barista:	Sì, c'è _____ postazione con _________ __________
Tu:	Possiamo chiacchierare (*Can we chat*) on line?
Barista:	Sì signore, abbiamo 96 _______________ _______________
L'amico:	Grazie, cameriere.
Barista:	__________. Ritorno subito.

[Print the form to complete it.]

Spanish

D2) Mosaicos: Spanish as a World Language

http://www.prenhall.com/mosaicos/

This is one of several impressive companion sites for languages textbooks published by Prentice Hall (see D5, D10), accompanying the introductory Spanish textbook *Mosaicos*. The Internet content, developed by Lina Lee at the University of New Hampshire, provides the following for each chapter: "*A escoger*, which offers practice of chapter vocabulary and cultural themes through multiple choice questions; *A conversar*, which provides students with the opportunity for real communication in Spanish using chapter vocabulary and themes; *A escribir*, containing a Web-research and writing section with links to chapter-related Websites; *A explorar*, which provides an annotated list of Websites that relate to each chapter's cultural focus; *A investigar*, which allows students to use keywords to search the World Wide Web for more sites related to each chapter's cultural focus; *Buzón*, which

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provides numerous links to sites offering on-line Spanish chat and Spanish 'keypals'; and the *Salón de profesores*, which provides an area for teachers, clickable off the main menu, containing extensive links to cultural and instructional Websites."

D3) **Poco a poco**
http://poco.heinle.com/

These are materials similar to the ones described in D1 based on the 18 chapters of the text *Poco a Poco* (Heinle & Heinle). They include interactive grammar exercises with feedback (every answer is marked and a total score given). A useful feature is a box next to the questions containing letters with accents that can be selected with a click.

D4) **Puentes**
http://Puentes.heinle.com/

These materials, still under development, are similar to the ones described in D1 based on the text Puentes (Heinle & Heinle), and developed by Lina Lee at the University of New Hampshire.

D5) **Arriba!**
http://www.prenhall.com/arriba/

These materials, based on the textbook *Arriba* (Prentice Hall) for introductory Spanish, are presented in a similar format to D2 above. Content was developed by Gregg Courtad at Mount Union College.

D6) **Tecla**
http://www.bbk.ac.uk/Departments/Spanish/TeclaHome.html/

This site is somewhat similar to D13 below but not as comprehensive. "Tecla is a text magazine written for learners and teachers of Spanish. It is a joint production between the Spanish Department at Birkbeck College and the Consejería de Educación of the Spanish Embassy in London. Tecla is written by Emma Nieves Trelles and Caya Marta Gutiérrez." Exercises consist of questions (odd man out, true/false, comprehension, crossword), and there is quite a bit of good reading in Spanish.

D7) **Latinworld**
http://www.latinworld.com/

This site combines a directory of Web resources on Latin America (North, Central and South) and the Spanish-speaking Caribbean, with a magazine.

While the dominant language is Spanish, many references are in English, with Portuguese featuring strongly in the section on Brazil. It does not yet include any exercises for students to do but offers similar potential for developing the activities included in D6, D11 and D13.

French

D8) first year french@ut austin
http://www.lamc.utexas.edu/fr/home.html

See A1.3

D9) Voilà Activité
http://voila.heinle.com/title.htm

These are materials similar to the ones described in D1 based on the 20 chapters of the text *Voilà* (Heinle & Heinle), developed by Terri Nelson at California State University. The site also uses sound and video for some of the activities but not everything was completed at the time this book went to press. Grammar exercises based on this text are discussed in F3 below.

D10) Chez Nous
http://www.prenhall.com/cheznous/

Another Prentice-Hall site which offers activities based on the textbook *Chez Nous* ranging from multiple choice or true and false questions to task-based exercises similar to D2. Content was developed by Jayne Abrate at the Southern Illinois University.

D11) Bonjour de France
http://www.bonjourdefrance.com/

So far, three issues of this excellent on-line magazine have appeared. It provides links to the regions around Brest and Nice (homes of the partners in the project), games and a site for contacts. The magazine itself has an editorial, a guest article, and a section, Apprentissage, which offers texts in French at four levels of competence from beginners to advanced. Many words in the text are linked either to a vocabulary frame which explains the word in French, or a grammar frame which explains the structure. Multiple choice questions test comprehension mainly, but also some points of grammar, with a running score provided. A vocabulary section explains the meaning of a chosen expression, and a grammar section deals with a point of grammar (again with a multiple choice test). A feature of the site is that the approach is cumulative, with each number of the magazine dealing with a limited number of items – one piece of vocabulary, one point of grammar, one excursion into the regions of Brest and Nice. If the venture continues, however, a considerable mass of material will be built up in the archives that could be of great use to teachers.

German

D12) Deutsch online
http://web.uvic.ca/german/dol-demo/

See C6.3

D13) Deutsch lernen mit *Jetzt online*
http://www.goethe.de/z/jetzt/

This is a motivating interactive site produced by the Goethe Institut which provides a variety of exercises and games based on the on-line youth magazine *Jetzt*. The site makes it clear that its focus is on reading and writing. It is designed for self-access and independent learning but contains material that teachers might want to use in their own classes and teachers are supported by a forum. It offers authentic material in the form of unaltered selections from *Jetzt* , of particular interest to young learners. Some words are hyperlinked to journeys across the Web, to tasks, or to explanations. Students can consult an on-line dictionary and grammar. There are also writing competitions with prizes.

E. Grammar instruction/pronunciation/dialogues – traditional

Sites in this section provide fairly traditional language instruction, focussing on the teaching of structures and dialogues. Some sites include sound and links to other relevant materials which add a useful dimension to what would otherwise be more comfortably learnt from a book.

German

E1) **The German Electronic Textbook**
http://www.wm.edu/CAS/modlang/grammnu.html

This site, developed by Gary Smith, provides simple clearly laid out grammar rules with relevant examples. A new section, using sound, does the same for pronunciation.

Indonesian

E2) **Learn Indonesian in seven days**
http://infoweb.magi.com/~mbordt/bahasa8c.htm

This is a modest site which has been included because so little is available for Indonesian. It is based on a booklet providing "one approach to learning a very basic level of the Indonesian language, Bahasa Indonesia, with no strain". It does not yet allow for interactivity but is quite useful for refreshing knowledge. Without sound added it is a little too difficult for complete beginners. The authors are Michael Bordt and Liswati Seram. It uses lovely tongue-in-cheek language:

> *"Saya tidak bisa bahasa Indonesia*
> *I don't speak Indonesian*
> *This will be painfully obvious to any Indonesian, but it's a polite way to fill in those awkward moments."*

Russian

E3) **Russian Advanced Grammar**
http://www.departments.bucknell.edu/russian/index.html

This is a useful revision course for intermediate to advanced students developed by Robert Beard and integrated into the program at Bucknell University, Lewisburg. It has links to other Russian grammars.

Japanese

E4) International Language Development - Japanese
http://www.teleworld1.net/ild/japanese/jlessons.shtml

This site includes 20 lessons with dialogue, vocabulary, grammar and exercises. (Similar exercises are also available in other languages.)

French

E5) French Language Course
http://www.jump-gate.com/languages/french/

This site, developed in a very personal approach by Jacques Léon, teaches grammar, pronunciation and dialogues with sound.

Chinese

E6) Conversational Mandarin Chinese
http://philo.ucdavis.edu/CHINESE/ccol.htm

This site, developed by Tianwei Xie, provides a series of sentence-based lessons, each divided into sounds, new sentence modules and practice.

E7) Conversational Shanghai Chinese
http://www.fbyte.com/Shanghai/

This site, developed by Benjamin X. Ao, provides a series of dialogues with sound, including notes on usage and vocabulary.

Swedish

E8) A Swedish Language Course
http://www.sas.upenn.edu/~arubin/swedish.html

This site, developed and maintained by Aaron Rubin at the University of Pennsylvania, is still under construction. The course is for beginners and provides a pronunciation guide and grammar lessons with vocabulary and exercises. The site gives links to an on-line Swedish-English dictionary, a Swedish grammar, and other Swedish sites of interest.

Hungarian

E9) A Hungarian Language Course

http://www.sas.upenn.edu/~arubin/hungarian.html

This site, developed and maintained by Aaron Rubin at the University of Pennsylvania, provides an introduction to Hungarian. The course is for beginners and provides a pronunciation guide and nine grammar lessons with vocabulary and exercises. The site gives links to on-line Hungarian-English dictionaries, an Hungarian pronunciation tutor, and other Hungarian sites of interest.

Other

E10) A Web of on-line grammars

http://www.facstaff.bucknell.edu/rbeard/grammars.html

This is a wonderful collection of on-line grammars in an amazing number of languages, artificial and real. It is maintained by Robert Beard who has developed the Russian materials above. While most of these can be described as on-line grammar texts, some also include sound and dialogues and a small number offer interactive exercises.

E11) A Web of on-line dictionaries

http://www.facstaff.bucknell.edu/rbeard/diction.html

Another impressive collection maintained by Robert Beard, this one for on-line dictionaries. There are links to over 500 dictionaries in 140 different languages (including Klingon!).

F. Grammar/vocabulary exercises – interactive with feedback

Sites in this section offer more sophisticated grammar and vocabulary learning in technical terms than the above. Students are required to interact with the materials in a variety of ways, ranging from clicking boxes to filling in gaps and writing whole sentences. Feedback is also given in a variety of ways, ranging from looking up answers to displaying the answers next to the student's response and scoring the entire exercise. Exercises here are on the whole produced using Java, Javascript or CGI script. Most sites listed in section C and some in B and D also feature exercises of this kind.

German

F1) **Deutsch Plus 2 Online**
http://www.bbc.co.uk/education/languages/german/index.shtml

This site is one of several in various languages (see F6, F9, F11 below) developed by the BBC. It contains on-line units to supplement *Deutsch Plus* 2, a BBC radio series for intermediate level students of German. It comprises five units, covering topics such as homeland, family, studies & training, leisure, and money. Each unit contains a dialogue (Real Audio), glossary, and drag and drop, true/false, or fill-the-gap exercises. The materials were developed by Glennis McGregor (Producer/Designer) and Corrina Schicker.

French

F2) **Virtual Language Class**
http://www.nyp.ac.sg/fl/fl_fcfrm.htm

This is a site at the Foreign Language Centre at Nanyang Polytechnic in Singapore which provides comprehensive interactive grammar exercises and games. Students are required to fill in blanks or click on options. The program gives the correct answer after two tries and some sections are scored. Accents are handled by downloading the French keyboard.

F3) **Interactive French Quizzes**
http://eee.uci.edu/96s/24060/fliq.html

This site, developed by Eric Friedman at the University of California, Irvine, provides interactive quizzes with feedback on various topics and areas of grammar. In contrast to F2 above, all exercises here are set in a context (sentence/short dialogue/longer story), and some include sound (not yet functional). Accents are handled by following simple instructions for different platforms. Feedback is friendly and personal, sending users to rules (in the textbook *Voilà*) if necessary. A nice touch is that the program does not repeat wrong answers in the feedback

F4) QCM en francais
http://www.ciel.fr/scripts/fastsql.exe?script=/qcm/qcm&id=1
see also - *http://www.ciel.fr*

This site, developed by Philippe Chataigner at the *id informatique* in Brest, provides a set of questions in several grammatical categories with one word missing (some of them famous quotations) at four levels of proficiency from complete beginners to advanced students. Users can select the missing word from a multiple choice list. At the end of a completed series of sentences, quotations are shown in full with the correct answers in green and where the student's response was incorrect the text is in red.

F5) first year french@ut austin
http://www2.sp.utexas.edu/fr/student.qry

This site (presented more fully in A1) provides grammar drills based on the textbook *Parallèles* (Prentice-Hall) organized into 14 dossiers each containing several exercises. In each exercise users answer fill-in-the-blank questions or write whole sentences. Correct answers are given only after all sentences in a series have been completed. Feedback consists of displaying the question, the student's answer, and the suggested answer.

F6) The French Experience & Leisure French Online
http://www.bbc.co.uk/education/languages/french/index.shtml

This site contains on-line units to supplement two BBC radio series - *The French Experience* and *Leisure French* - for intermediate and upper intermediate students. For each series there are various units, each containing a dialogue (Real Audio), glossary, and drag and drop, true/false, or fill-the-gap exercises. The materials were developed by Glennis McGregor (Producer/Designer) and Fiona Holmer.

Spanish

F7) Spanish 506 at Texas
http://www2.sp.utexas.edu/SP506/student.qry

This site uses the same structure as F5 above to provide grammar exercises for first year Spanish.

F8) Spanish Language Exercises

http://mld.ursinus.edu/~jarana/Ejercicios/

This extensive site, developed by Juan Ramón de Arana at Ursinus College, offers self-check exercises, often set in the context of a short story, in interesting different formats with feedback given instantly. It offers links to other Websites on which some exercises are based. A facility to email answers to the instructor is provided.

F9) Sueños 2 Online

http://www.bbc.co.uk/education/languages/spanish/index.shtml

This site contains on-line units to supplement *Sueños*, a BBC radio series for intermediate level Spanish learners. It comprises five units, covering topics such as music, food, health, shopping, and ecology. Each unit contains a dialogue (Real Audio), glossary, and drag and drop, true/false, or fill-the-gap exercises. The materials were developed by Glennis McGregor (Producer/Designer), Begoña Rodriguez, and Maria E. Placencia.

Russian

F10) Golosa

http://www.auburn.edu/~mitrege/RWT/Golosa1/index.html

This site, developed by George Mitrevski at Auburn University, provides extensive interactive exercises for beginners and intermediate students, based on the text *Golosa* (Prentice Hall). It includes listening, translation and dictation exercises.

Italian

F11) Italianissimo Online

http://www.bbc.co.uk/education/languages/italian/index.shtml

This site supplements *Italianissimo*, a BBC television series for beginners (which also has an accompanying course book and audio cassette pack). The site comprises five units, each containing a dialogue (Real Audio), glossary, and drag and drop, true/false, or fill-the-gap exercises. The materials were developed by Glennis McGregor (Producer/Designer), Marta Romanegro Panzieri, and Fiona Holmer.

G. Sites in target language country providing authentic interaction

These are sites that were not developed for the purpose of language teaching but for other specific purposes in countries where the target language is spoken. They can provide valuable and meaningful goal-oriented activities for intermediate and advanced students. We list a few examples in German. Others are easily located through target language networks.

German

G1) Funline

http://www.funline.ch/

This is a site in Switzerland, developed by Dominik Landwehr, addressing young people anywhere. It contains colourful graphics and provides news on various subjects, a girls' section, frequently updated games, a user-friendly chat, job offers, an agony column, competitions with real prizes to win and a forum for buying and selling. This is an excellent site for truly interactive activities in young "netspeak".

G2) Interactive materials for German

http://www.al.lu/deutsch/index.html

This is an extensive site, still under development, providing interactive materials relevant for junior high school students in a German speaking environment. It is being developed by a team in Luxembourg led by Alexis Werne. An excellent aspect of the site is that it provides interesting tips on writing essays in German which would be very useful for students studying German as a foreign language. Exercises which promise to provide interesting ways of learning grammar are being developed, such as learning the case system by way of an interactive crime story. There are also extensive materials for reading and wonderful creative writing exercises in which students are asked to continue/complete short stories with the option of Web publication.

G3) Cat magazine

http://www.katzen-online.de/magazin/enter.html

This site offers to produce a personal information page on the subject of cats based on the information sent in by the user. It provides beautiful graphics and requires users to tick boxes related to their cat's characteristics, personality and lifestyle. While these sorts of sites may well be a vehicle for some form of advertising, they can provide motivating one-off activities on meaningful subjects for beginning students.

H. Moos/Muds/Mushes

Sites included here provide text-based interaction in the target language with others the world over. They provide excellent opportunities for access to native speakers in authentic environments. They differ from chat sites (see L below) in that users can move around different locations/rooms in the MOO and (in some) create objects to be left for other users. To navigate a MOO basic commands need to be known (see 3:B9). These are either the standard English commands or their target language and site-specific versions. The following sites offer varying degrees of sophistication and user-friendliness.

German

H1) Virtual Classrooms

telnet://sol.uvic.ca 6250

This is a MUSH operating at the University of Victoria as part of the site discussed in C6. It allows students to meet in different teaching rooms (which are also used for tutorial meetings) and other locations resembling a university environment. The site also operates in French, Spanish and English. It offers its own novice tour in English which is highly recommended for anyone new to this environment.

H2) Morgengrauen

http://mud.uni-muenster.de/online/

This is a tongue-in-cheek fantasy environment all in German with lots of relevant resources including a list of *Stammtische* in various German cities. The site is very user-friendly and includes a list of further German Muds. Since it was not especially created for language teaching purposes, it is a challenging site to use but the reward lies in its ultimate authenticity.

French

H3) Le MOO francais

telnet://moo.syr.edu:7777/

This MOO provides "a place for students and enthusiasts of the French language to meet and interact in an environment rich with excuses for practising conversational French!" and playing games in French. More information is given in French and English on the MOO homepage: *http://moo.syr.edu/~fmoo/fmoo/*

Italian

H4) **Little Italy**
telnet://little.usr.dsi.unimi.it:4444/

This MOO provides a sophisticated all-Italian environment. "Little Italy è un laboratorio vivente per la realizzazione di una società e di un'economia digitali e distribuite." Its physical location in Milan gives it an even more authentic flavour. The MOO homepage with more information can be found on *http://kame.usr.dsi.unimi.it:4444/*

Spanish

H5) **Mundo Hispano**
telnet://europa.syr.edu:8888/

This is a "combination language-learning environment and meeting place" for intermediate or advanced students created at Syracruse University which provides a virtual replica of well-known places in Madrid and other Spanish-speaking cities. On-line help is available in English and Spanish.

Multi-lingual

H6) **Moosaico**
telnet://moo.di.uminho.pt:7777/

This is a fantasy-world environment supporting a large number of European and Asian languages.

ESL

H7) **schMOOze University**
http://schmooze.hunter.cuny.edu:8888/

This is the homepage for schMOOze University which contains a MOO for ESL/EFL learners. It has hundreds of registered users in many countries and offers virtual campus facilities such as classrooms with tables and blackboards which can be scheduled for teaching sessions, and dormitories which students can decorate to their liking. Students also have access to language games and an on-line dictionary. It is one of the oldest and most successful MOOs for language learning purposes. The site also has links to other ESL resources.

Other

H8) Gurk's Moo Gate

http://insanity.halifax.ns.ca/moogate.html

This contains very extensive lists of general MOOs. While there are no other specific languages sites listed at the moment, it is an excellent page for getting an impression of the sorts of purposes for which MOOs tend to be used.

I. Self-contained interactive tasks – ideas

Sites listed here provide opportunities for goal-oriented activities which either produce meaningful tangible outcomes for the user or simply an opportunity for playing games using the target language. Many such activities are contained throughout the sites listed in earlier sections.

German

I1) **Java Spiele**
http://user.baden-online.de/~flange/javaspiele.html

A nice collection of interactive games, some with German instructions, including "Warp Bill Gates" in German.

French

I2) **Station arrivée**
http://metro.jussieu.fr:10001/bin/statmap/french/france/paris?241,160

Students are provided with a map of the metro. They can choose a point of departure and arrival and will be given both the route they have to take and the time it will take to complete the trip.

I3) **Birthday issue Paris Match**
http://www.parismatch.tm.fr/

This is integrated into the activities of the Austin site. (See A1.3) Students are asked to call up the issue of their birthdate and comment on the cover. This has all sorts of potential for cultural, linguistic and historical activities.

All Languages

I4) **Virtual Florist**
http://www.virtualflorist.com/

Very user-friendly site in which students can send a variety of virtual flower bouquets together with a message which is received by email. While instructions are in English, the message can be sent in any language. To avoid the irritating dual-language end product, it might be worth going to the authentic sites in the respective countries, such as Fleurop in Germany, so that students can at least get all the instructions in German. Here, however, they will not end up with a tangible product.

I5) Virtual Presents

http://www.virtualpresents.com/

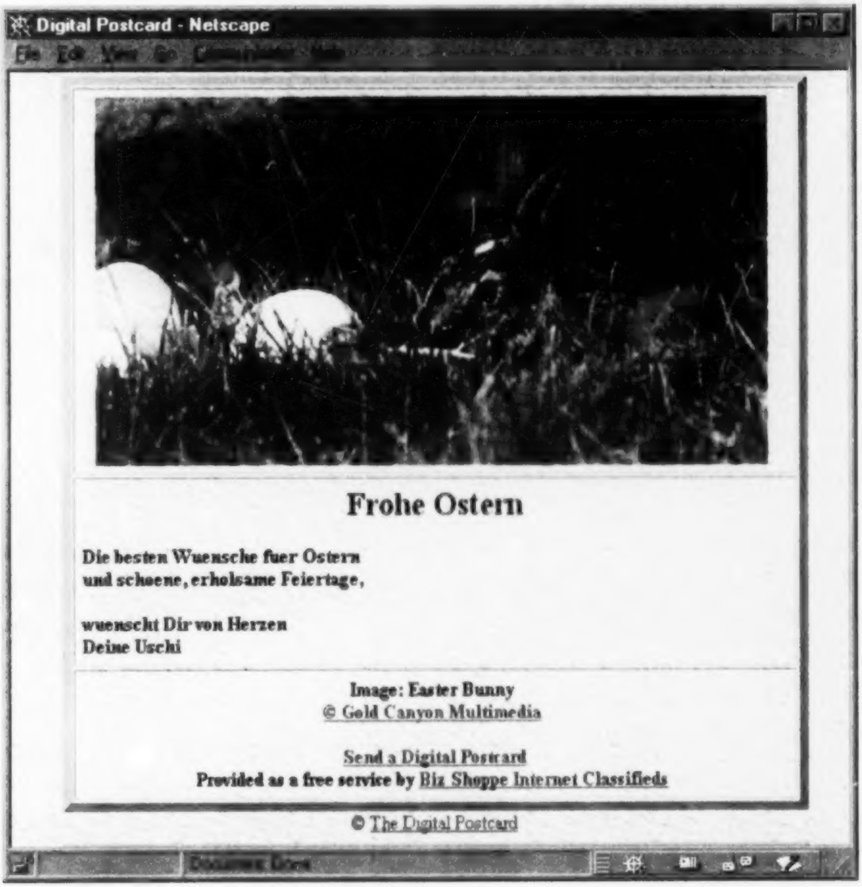
As in Florist this site is very user-friendly. It provides a variety of virtual objects to be sent together with a message.

I6) The Virtual Card Shop

http://www.bizshoppe.com/cardshop.html

This is the best version of the genre in which students can send all sorts of greeting cards. The advantage here is that the site provides a large variety of languages in which all instructions are given. The task, too, is much more complex since students can create their own version of the available models by adding backgrounds, choosing colours and attaching tunes and links. They can even create an entirely new card. Naturally the site is not quite as user-friendly as I4 and I5 above but well worth the time spent on understanding the instructions since they are all in the target language. It provides an excellent opportunity for goal-oriented task-based learning in which students end up with a tangible product, either to keep (in printed

Fig. I6.1



Frohe Ostern

Die besten Wuensche fuer Ostern
und schoene, erholsame Feiertage,

wuenscht Dir von Herzen
Deine Uschi

Image: Easter Bunny
© Gold Canyon Multimedia

Send a Digital Postcard
Provided as a free service by Biz Shoppe Internet Classifieds

© The Digital Postcard

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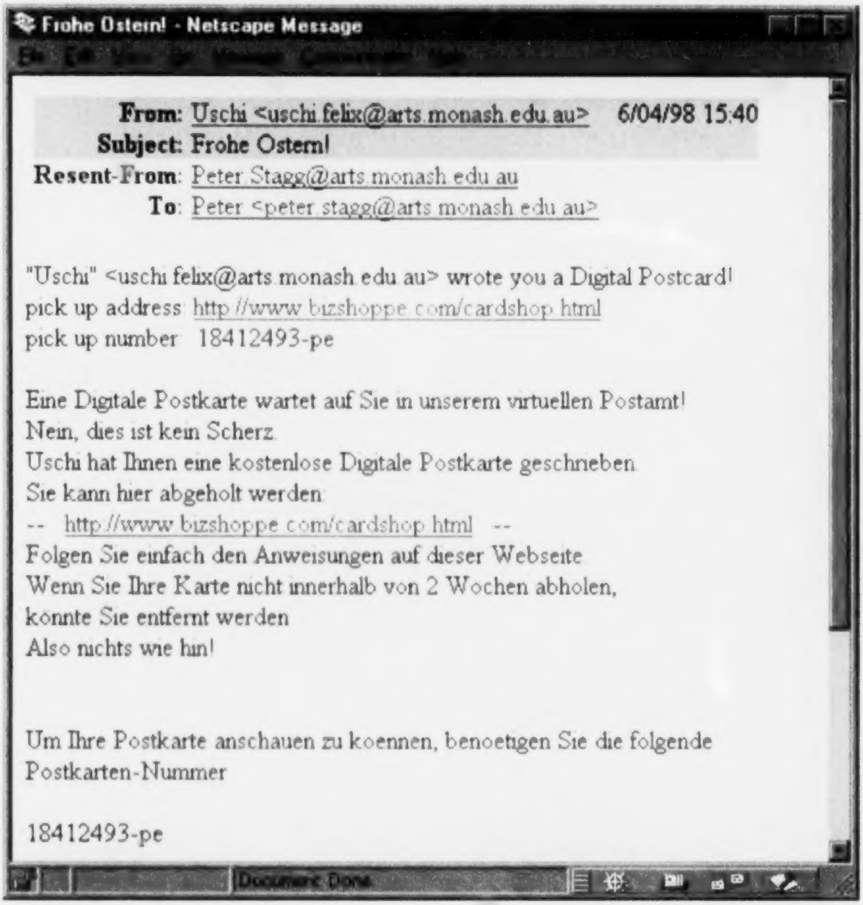
form) or to send to anyone they wish. This activity could easily be set as an assignment sent to the teacher. Here is a finished product in German together with the email message sent to the receiver:

Fig. 16.2



From: Uschi <uschi.felix@arts.monash.edu.au> 6/04/98 15:40
Subject: Frohe Ostern!
Resent-From: Peter.Stagg@arts.monash.edu.au
To: Peter <peter.stagg@arts.monash.edu.au>

"Uschi" <uschi.felix@arts.monash.edu.au> wrote you a Digital Postcard!
pick up address: http://www.bizshoppe.com/cardshop.html
pick up number: 18412493-pe

Eine Digitale Postkarte wartet auf Sie in unserem virtuellen Postamt!
Nein, dies ist kein Scherz.
Uschi hat Ihnen eine kostenlose Digitale Postkarte geschrieben.
Sie kann hier abgeholt werden:
-- http://www.bizshoppe.com/cardshop.html --
Folgen Sie einfach den Anweisungen auf dieser Webseite.
Wenn Sie Ihre Karte nicht innerhalb von 2 Wochen abholen,
konnte Sie entfernt werden.
Also nichts wie hin!

Um Ihre Postkarte anschauen zu koennen, benoetigen Sie die folgende Postkarten-Nummer:

18412493-pe

ESL

17) Singapore

http://www.newasia-singapore.com

One of the best constructed sites to date in terms of meaningful interactivity was produced for the Singapore Tourist Promotion Board. One of the initial features was to run a competition with two trips to Singapore as the prize. While the prize is no longer available, the activity of producing a collage of Singapore still is and the potential for using this resource in an intermediate ESL class is enormous. Without any need for programming knowledge, users are led through a wonderfully varied set of written and visual instructions, manipulating beautifully produced images and text, changing sizes, positions and layers to create a collage representing their own idea of Singapore. The program automatically produces a first class

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version in terms of resolution. Clicking on the chosen images in the collage produces a personal tour of Singapore by opening relevant text windows, describing historical, cultural or geographical sites. (This site is in the process of being updated and may not be accessible for a while.)

J. Self-contained interactive tasks – proformas to print or submit

The activities listed here are similar in genre to the ones discussed in section D above. They are, however, not based on a textbook and offer a wider spectrum of tasks in terms of both level and subject matter.

German

J1) Deutsche Internet Übungen (German Exercises on the Web)

http://www.uncg.edu/~lixlpurc/publications/NetzUeb.html

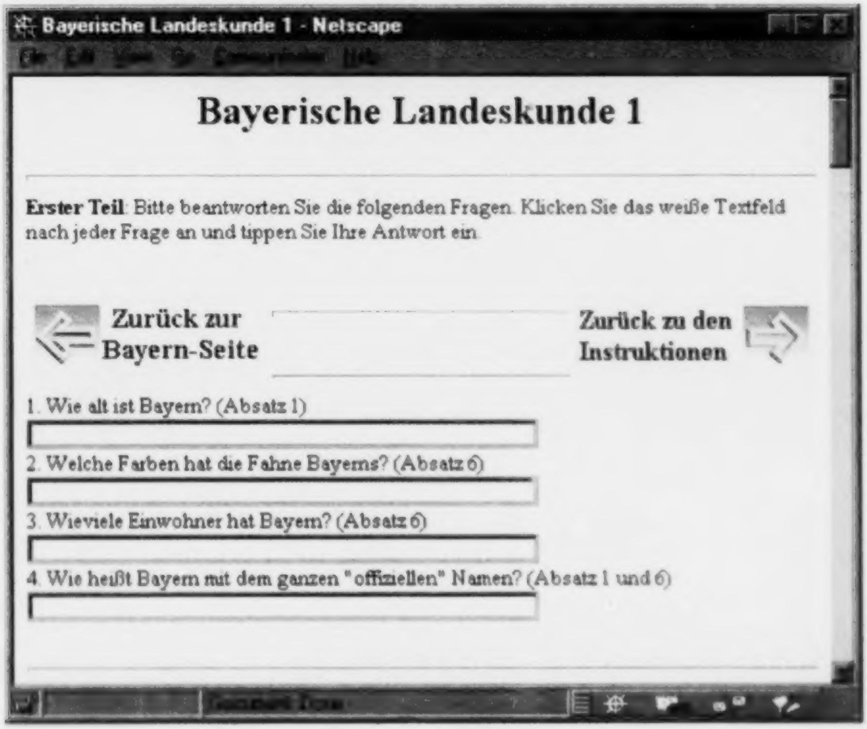
This is one of several very extensive collections of materials for German assembled by Andreas Lixl-Purcell at the University of North Carolina. Activities range from self-contained tasks for beginners to sophisticated literature-related activities for advanced students. Here is one example:

Bayerische Landeskunde

http://www.ualberta.ca/~german/bayern25.htm

This is a very user-friendly self-contained task developed by Manfred Prokop which sends students to only one site giving information on the German state Bayern. Students are then asked to answer questions and submit them electronically. Following is a shortened version of the task:

Fig. J1.1



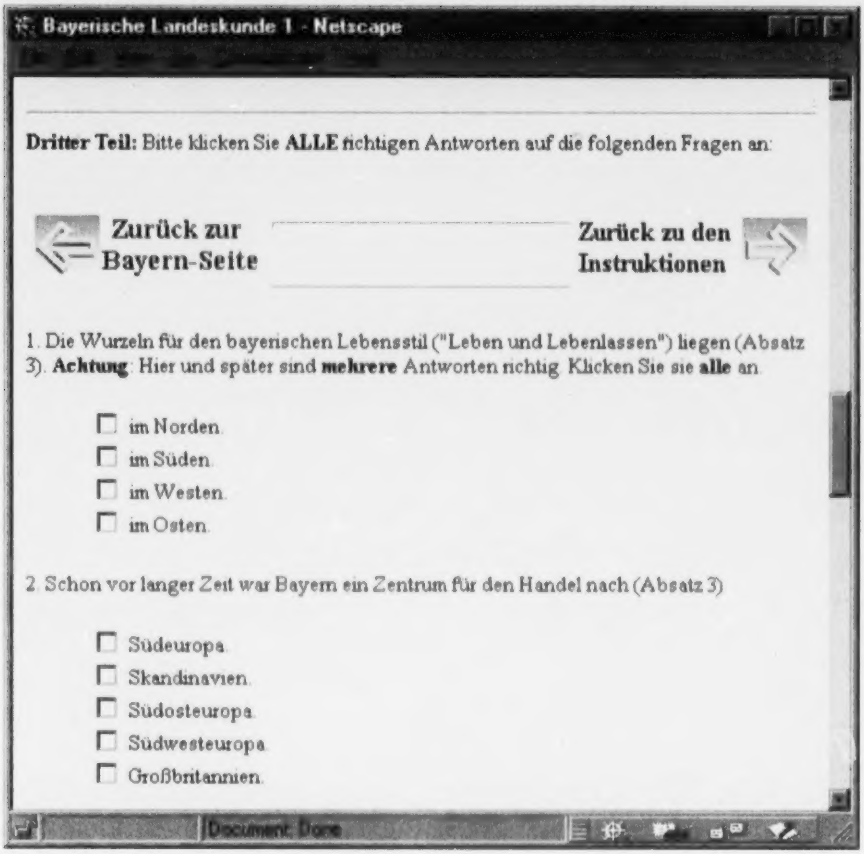
Bayerische Landeskunde 1 - Netscape
Zurück zur Bayern-Seite
Zurück zu den Instruktionen

Bayerische Landeskunde 1

Erster Teil: Bitte beantworten Sie die folgenden Fragen. Klicken Sie das weiße Textfeld nach jeder Frage an und tippen Sie Ihre Antwort ein.

1. Wie alt ist Bayern? (Absatz 1)
2. Welche Farben hat die Fahne Bayerns? (Absatz 6)
3. Wieviele Einwohner hat Bayern? (Absatz 6)
4. Wie heißt Bayern mit dem ganzen "offiziellen" Namen? (Absatz 1 und 6)

Fig. J1.2


Bayerische Landeskunde 1 - Netzcape
Zurück zur Bayern-Seite
Zurück zu den Instruktionen
Document: Done

Dritter Teil: Bitte klicken Sie **ALLE** richtigen Antworten auf die folgenden Fragen an:

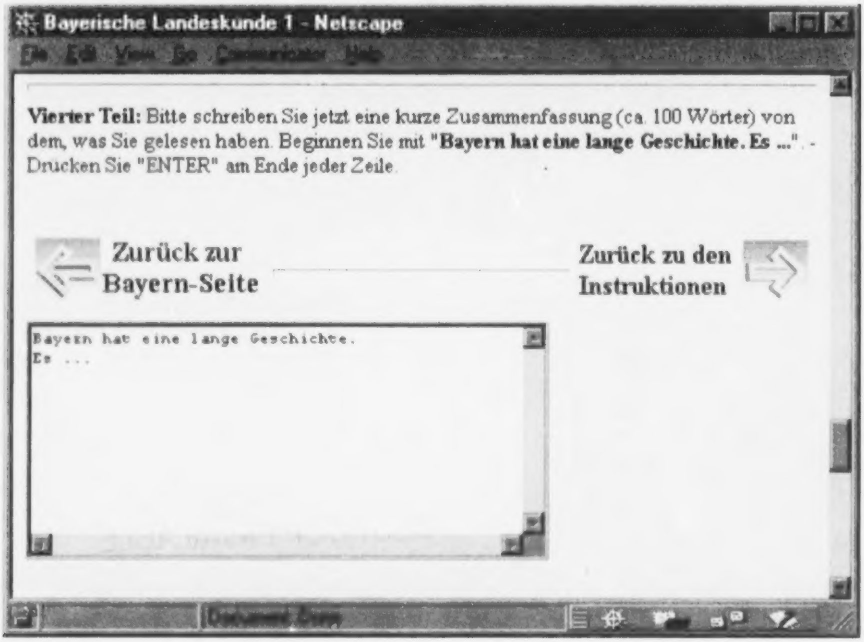
1. Die Wurzeln für den bayerischen Lebensstil ("Leben und Lebenlassen") liegen (Absatz 3). **Achtung**: Hier und später sind **mehrere** Antworten richtig. Klicken Sie sie **alle** an.

☐ im Norden.
☐ im Süden.
☐ im Westen.
☐ im Osten.

2. Schon vor langer Zeit war Bayern ein Zentrum für den Handel nach (Absatz 3)

☐ Südeuropa.
☐ Skandinavien.
☐ Südosteuropa.
☐ Südwesteuropa.
☐ Großbritannien.

Fig. J1.3


Bayerische Landeskunde 1 - Netzcape
File Edit View Go Communicator Help
Zurück zur Bayern-Seite
Zurück zu den Instruktionen
Document: Done

Vierter Teil: Bitte schreiben Sie jetzt eine kurze Zusammenfassung (ca. 100 Wörter) von dem, was Sie gelesen haben. Beginnen Sie mit "**Bayern hat eine lange Geschichte. Es ...**". - Drucken Sie "ENTER" am Ende jeder Zeile.

```
Bayern hat eine lange Geschichte.
Es ...
```

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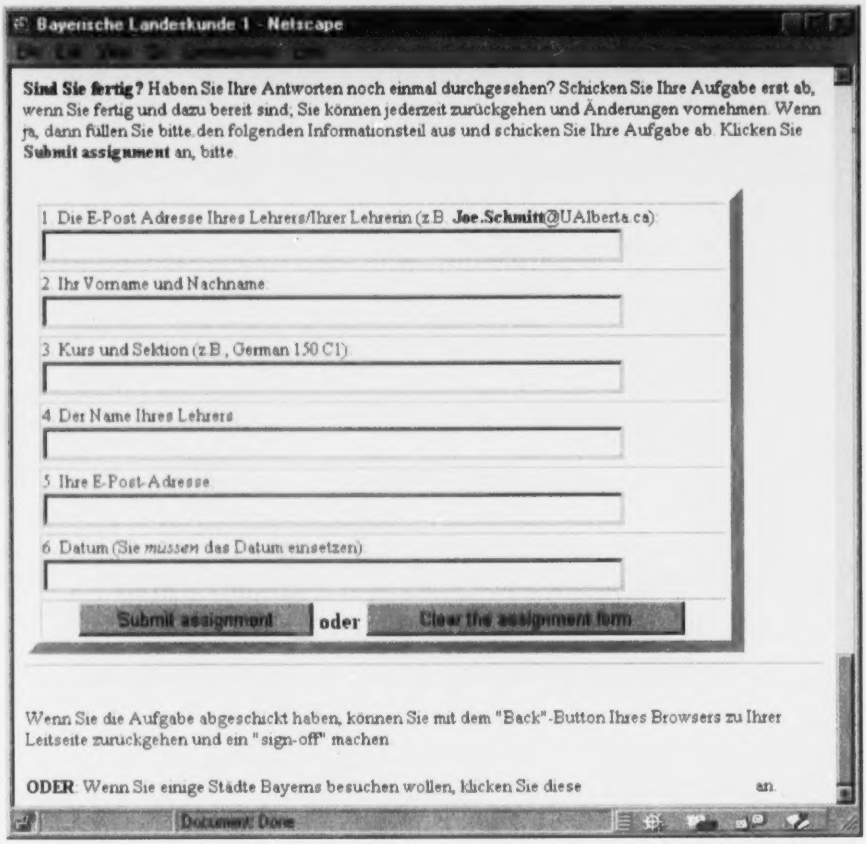
Fig. J1.4


Bayerische Landeskunde 1 - Netscape
Submit assignment
Clear the assignment form
Document: Done

Sind Sie fertig? Haben Sie Ihre Antworten noch einmal durchgesehen? Schicken Sie Ihre Aufgabe erst ab, wenn Sie fertig und dazu bereit sind; Sie können jederzeit zurückgehen und Änderungen vornehmen. Wenn ja, dann füllen Sie bitte den folgenden Informationsteil aus und schicken Sie Ihre Aufgabe ab. Klicken Sie **Submit assignment** an, bitte.

1. Die E-Post Adresse Ihres Lehrers/Ihrer Lehrerin (z.B. **Joe.Schmitt**@UAlberta.ca):
2. Ihr Vorname und Nachname:
3. Kurs und Sektion (z.B., German 150 C1):
4. Der Name Ihres Lehrers
5. Ihre E-Post-Adresse
6. Datum (Sie *mussen* das Datum einsetzen)

oder

Wenn Sie die Aufgabe abgeschickt haben, können Sie mit dem "Back"-Button Ihres Browsers zu Ihrer Leitseite zurückgehen und ein "sign-off" machen.

ODER: Wenn Sie einige Städte Bayerns besuchen wollen, klicken Sie diese an.

J2) Deutsche Internet Chronik (German Web exercises)

http://www.uncg.edu:80/~lixlpurc/GIP/german_units/exercover.html

This is another impressive Lixl-Purcell site containing a large number of exercises for different levels of proficiency. We have included the complete list for the elementary level. The same topics are available at three higher levels:

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Quoted From the Web J2.1:

Deutsche Internet Chronik

German Web Exercises

Andreas Lixl-Purcell, PhD
U of North Carolina at Greensboro

A. Elemenatry Level Exercises

- Übung: Ethnische Minderheiten in Mitteleuropa. Ausländer
  Web Unit 1. Foreigners and Minorities
- Übung: Frauengruppen. Frauennetze und Informationen
  Web Unit 2. Equality between Men and Women
- Übung mit Bildern: Dias zur deutschen Einheit 1990. Staat und Politik
  Web Unit 3. Living Together in a Modern Society
- Übung: Versandhäuser und Verkehr. Autos und Kataloge
  Web Unit 4. Transportation, Science and Technology
- Übung: Sprachkurse in der BRD. Schule und Ausbildung
  Web Unit 5. School Systems
- Übung: Bundeswehr Universitäten. München und Hamburg
  Web Unit 6. German Military
- Übung: Tourismus und Reiseinformationen. Tourismus
  Web Unit 8. Geography
- Übung: Sport und Alltag. **Gruppenarbeit** oder allein
  Web Unit 9. Daily Life
- Übung: Radikalismus. Dokumente und Fragen
  Web Unit 10. Radicalism

Links zu weiteren deutschen Internet-Übungen

More German Studies exercises. Elementary to intermediate level
http://www.uncg.edu/~lixlpurc/publications/NetzUeb.html

French

J3) **Français langue étrangère et langue seconde**
http:/ /www.swarthmore.edu/Humanities/clicnet/fle.html

This includes some similar materials to J1 above. It is part of ClicNet, an impressive site which collects resources on education, culture, art and literature, located at the University of Swarthmore and edited and illustrated by Carole Netter.

J4) **The WWW Notebook for teachers of French**
http://www.courses.has.vcu.edu/fln/faculty/smoore/intro.html

This very extensive site, developed and maintained by Sonja Moore at Virginia Commonwealth University, contains a large variety of exercises on topics ranging from *amour* to *voyages*. It also contains links to other resources, including video and sound, as well as an effective guide to creating Web pages.

K. Structured teaching plans for interactive tasks

Most activities listed here have been written by a variety of contributors for an Australian Federation of Modern Language Teachers Associations (AFMLTA) project, co-ordinated by Vincenza Tudini. The target audience are students in the school sector and contributions so far include Chinese, French, German, Indonesian, Italian, Japanese and Turkish. Activities vary in approach, content and scope but all provide interesting ideas to cover several teaching sessions. We have chosen tasks only for those languages not represented in sections D and J above. A site listing similar activities for school students produced by teachers in the California Foreign Language Project has also been included.

Chinese

K1) The Long Walk: A Journey as a Learning Activity

http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

This very extensive problem-solving task was prepared by Jean Clayton of CyberTalk - Language, Literacy & Learning Consultancies (South Australia). It is designed to cover a 4 to 6-week period, assuming a minimum of three lessons a week. We have included a summary of the task:

Summary K1.1

The Long Walk - a journey as a learning activity

Introduction

Students are assigned a journey of discovery along part of the Yangtze River, as a problem-solving situation, involving both language development and cultural explorations for small groups (4-8 students) of intermediate level students in upper primary-lower secondary or older.The conceptual framework is transferable to other languages. This covers approximately a 4-6 week period, assuming a minimum 120 mins per week. The following is just a brief extract and does not include WWW addresses or full task descriptions, which can be accessed from the full on-line version.

An important dimension of the journey theme, for Chinese students, is that it is an extremely useful experiential link to a most significant cultural topic – The Long March undertaken by revolutionary Communist forces in 1934, led principally by MaoTse-tung, from Hunan in South-East China to Henan in the North-West, a journey of over 9,000 km. on foot.

The task as it is described below involves a quite substantial journey, but could be made much more limited, as for example telling students to imagine that they are a tourist lost on the street in outer suburban Beijing (or Paris/Jakarta/Tokyo) and need to find the way back to their hotel. The purpose of the journeying is to activate existing language resources and to extend these with new items relating to the journey theme, within a realistic, purposeful and imaginative context. Topics include eating, travel, weather, clothing and equipment, directions, distances, letter writing, diary writing, enquiries, geographical terms. Before they undertake this task, students will need to be able to make general 'survival' requests and ask directions. Acquiring further language items along the way on their journey is a major focus in the task. The teacher should consult the suggested language-focus tasks to determine what other preparatory work may be required.

The learning task assigns students the task of 'finding their way home' from an unfamiliar starting point. The resource-based learning and collaborative task-based activity is specifically designed to work counter to 'predictable student answers to predictable teacher questions' which, as MacKenzie and Davis (1995) point out, are 'quite deadening to motivation'. This task is intended to provoke much discussion and interest in exploring what might happen next. The cultural understandings to be developed are defined by the teacher's chosen focus, including: the varied terrain, population density and sheer size of China; the importance of rivers such as the Yangtze, its floods and other impacts on rural life; current affairs such as the potential impact of the Three Gorges Dam; history (of the Yangtze, the Long March); China in economic and social transition.

Technological issues

The aim of the task is to have students locate their own WWW resources. Sites listed in the full version of this sampler offer lots of starting points and suggestions about how to proceed. The computer-based end of the language tasks adds a sense of personal purpose and increases the variety of resources, as well as meeting different learning styles. Teachers will need to be able to download or bookmark from the sites above unless they are working with students who have the access and skills to do this themselves. It would be ideal for each student group to have independent Internet access. As most students below senior secondary will not be able to read computer texts written in Chinese script, tasks are built around WWW texts with high levels of English language content. It is also assumed that most teachers will not yet have their Internet browsers configured to display and send Chinese script, and that not all will be using Twinbridge or other Chinese language word processors yet.

The computer provides visually stimulating images and Chinese characters appear on nearly every China-focus WWW Page. If students can see Chinese characters in actual use and can be attracted to find out what meanings they represent (for example in WWW page banners, media headlines, on maps) then they should be attracted to undertake the challenge of reading and producing their own written script. Working in a small group with a computer allows students to talk and plan together around the computer, and re-arrange and edit their own texts with tremendous flexibility. They can transfer electronic text and images direct from their research onto the computer to re-use in their reports and can learn about copyright and proper referencing. End products can be printed as very professional looking resource materials for other learners to use, or can be presented as Overhead Projectuals (OHPs) or posters.

Features of task design

The activity is problem-based - the aim, to reach a destination. The task can be collaborative or competitive, with each group trying to arrive first and other groups seeking to assist or inhibit their progress (for example raising new problems for them to solve or providing clues). The teacher determines specified language tasks to be completed en route and checked off the list to qualify for 'safe arrival' at the destination. This will increase the Chinese language input and production. Some suggestions for Chinese language tasks are included below. The lessons cannot really be set up as individual pre-planned sessions, because each group will plan and execute each day of their journey themselves, each lesson being time for joint research and discussion and each homework writing up a diary of the day's events and getting planning notes together for the next day of travel.

The main role of the teacher is to ensure the necessary resources are available, to suggest alternatives when ideas are running out for forward progress, and to provide explicit language input (alongside what might be provided by more advanced learners or home-background speakers of Chinese). The situation which initiates the 'journey' needs to be made as realistic as possible so that students are inclined to involve themselves wholeheartedly in the communicative tasks of the activity. You might suggest any of the following to your class:

- their plane has suffered an emergency landing in a remote area with loss of baggage but no injury and help has not arrived
- having boarded the wrong bus, they have fallen asleep and arrived the next day in the wrong place minus their baggage
- they have missed a vital connection because their train was delayed due to a crash on the line and their baggage has been lost or stolen in the confusion
- their hire car has blown its engine in the 'middle of nowhere' and cannot be repaired as parts are simply not available; no-one knows where all the baggage is that was in the car when it was towed away to the nearest small town.

In any case, the task should involve immediate problems to solve: they are stranded in a remote corner of their target country with no passport and very little money and need to get to their intended destination by alternative means, using their ingenuity. You can make the task more challenging by restricting their means of transport (because of finance problems) to walking, bicycle, or rowing boat (if water is involved) and you could emphasise the danger of hitching lifts (to discourage this option). The requirements are that they must keep together as a group, all money (say the equivalent of $50 total per person for a 5 day journey) to be shared among the group and only the luggage they can carry. Since the major focus of the activity is communicative language development, just as if this were a real journey, the teacher needs to ensure a range of language tasks are integrated, as appropriate to the situation of each group, throughout the 'journey'. The teacher also needs to ensure appropriate Chinese language resources (both texts such as dictionaries, vocabulary lists and teacher expertise) are on hand to provide language assistance as requested and explicit input as required.

Some suggestions:

- Each group developing their own flash cards in Chinese script on essential survival items (bread, water, eggs, bed, telephone, shop, please help us, where is?) for seeking help from locals who will perhaps not understand what they are saying; these should be used to support role play of brief encounters and conversations.
- A 'conversation' with a local phone operator, giving the phone number in Chinese of family in Australia so they can get through to tell them what has happened. The operator's voice can be audiotaped for each group, with each individual recording their own call onto the tape; even better is the use of a pre-set answering machine which they each phone in to, or the teacher role-playing the operator at the other end of a phone.
- The teacher teaches one student at a time from the group, who then goes back to teach others in the group, some Chinese terms for direction, distance, movement verbs and expressions of location which may be useful for the journey (river, East, here are the mountains, Chongqing is 55 km from here).
- The teacher working with each group to construct dialogues about asking directions or locations and someone telling the way.
- Worksheets based around 'geographical' items of vocabulary such as landscape features (mountain, hill, river, sea, range) and including adjectives (such as high, steep, wide, long, distant, deep); drills can then work around noun-adjective combinations and expanding noun phrases.
- Combining pictures and labelling in Chinese, from basic match the picture to its label activities through to map-making, weather charts, geographic diagrams, reading/creating tourism brochures.
- All students taking 'photographs' of scenic spots as they travel with captions to be in pinyin or script, with images located from WWW.
- Students making notes so that they can write for an Australian magazine about this once-in-a lifetime experience when they 'get home' (in English but with Chinese language inserts wherever possible).
- Each student or each group keeping a diary which maps the area and activities covered each day, including at least two or three useful Chinese phrases learned from each day of the journey which may be useful to others in their group and to other groups.
- Each student adding new words and phrases to an English-Chinese class dictionary which other groups can consult. This is easy to set up in a new exercise book with pages labelled alphabetically and columns ruled for English/pinyin/script.

- Telephone calls or email to other groups in the class, to request/provide assistance with language items they might need, using the school internal phone/computer network.
- Each group or individual describing people they meet along the journey who provide help or advice eg farmer, shop-keeper, fisherman, teacher, Buddhist monk, tour guide, police officer, army conscript (this might later be extended into writing about a day in their life).
- Presenting a TV or radio interview to the Chinese 'local media' about some aspect of their adventure, using as much Chinese as they can manage for this. This could be audio/video-taped to add realism and for presentation later.
- Sending postcards to family and friends from the towns they pass through along the river so that people at home can be kept informed of what is happening; they will need to find a picture for each postcard and write something about their experiences for that day. Realistic blanks for the postcards can be set up using the computer.
- Role play of a day in someone else's life, based on the journey theme eg Mao encouraging his troops to follow him on The Long March and planning the route; farmers being moved off their land to make way for hydroelectric development.
- Each group constructing a board game based on the journey, on the model of Monopoly or similar: with Chance and Help Cards (in combinations of English, pinyin and script); money (in yuan) having to be spent depending on the luck of the dice; with script cards to guess the word (with a Free Turn or Go Back for right or wrong answers)
- A jointly constructed 100 question quiz on the Yangtze River, with each group contributing at least 10 questions and answers (in English, pinyin, script or combination).
- Preparing and presenting a talk and 'slide show' for other students or a parent-teacher evening, dealing with their adventure and how their studies of Chinese language helped them survive.
- A debate, for example benefits vs. perils of the Three Gorges Dam (see resources for this below) or role play (engineer, politician or ecologist) on this or similar issue.
- Reading and writing poetry and/or viewing and making art on a theme related to the journey; for example there are resources on the subject of the Three Gorges both for reading/viewing comprehension; this can lead to students' original creations eg writing haiku to embody the beauty and strength of the river and mountain gorges.

Procedures

The first step is to get students considering what questions they would need to ask the locals, and what questions they would be asking themselves. Who could they ask? What language items would they need to make their predicament and immediate needs understood? They also need to consider all the logistics of survival, such as food, shelter, weather. A worksheet of questions and a basic vocabulary list may be useful to support this dicussion. Each group will have to find or make their own maps and plot a course, calculating distances and overnight stopping points. You will simply give them a starting point and a destination and provide a wall map of the whole of China or the region that will be covered as a starting point, and a list of helpful Internet bookmarks. At this stage each student is given a diary format to be filled in for each day's journey.

Step 1 We need to find a useful map

Interactive (clickable) maps for many countries are available for on-line access and for downloading to your own computer from the World Wide Web. To search for an interactive map of China on the Internet, the search criterion was simply 'China Map'.

Step 2 We need information about human settlement and terrain we have to cross

They might manage to borrow a rowing boat or canoe, or build a bamboo raft or buy an inflatable dinghy, or alternatively be trekking or bike-riding along the shore, so there is a challenge in going beyond the maps and texts into the survival aspects which are not relevant, for example, to a luxury cruise experience.

Step 3 We need to find images for creating postcards and photo album

A major focus in the journey can be the visual experience, because images via hypertext links let you view the magnificent cliffs and stunning vistas, much of this now under threat from the World's biggest dam project.

Step 4 We need to check the weather and how much things might cost

Students can search on-line weather services, and check out how much local currency they need for essentials from the currency exchange pages (search under CURRENCY or YUAN).

Step 5 What about things we can do along the way, for diary entries?
WWW pages on the local places and local people offer very different perspectives from those usually offered in school texts eg white-water rafting, a diary from an American tourist's cruise with accompanying photographs, a photo album from of a tour guide, a walking tour in Tiger Leaping Gorge, a visit by American biologists seeking the endangered river dolphin. A photo reportage of traditional life along the Yangtze is provided by a visiting Japanese photographer at http://infoweb.asahi.com/paper/gallery/ehome.html looking at issues of 'China in transition' with focus on education, labour and lifestyle, indicating some of the tensions China faces in its push towards modernisation and globalisation. Travel sketches on line could be used to suggest that your students might sketch their own drawings for their diary or magazine article rather than simply using downloaded photographs.

Learning outcomes

There is a very strong focus in these tasks on autonomy in student learning and on communicative language being encountered and activated quite naturally in the course of meaningful inquiry. There is also a focus on students teaching students and on public performance and celebration as essential elements in learning. I realise this poses a challenge for teachers who are more used to structuring lessons around the input they can provide themselves, and also for students who feel more comfortable waiting for direction. It is my view that the kind of learning activities I propose lead to more purposeful engagement for each individual student and to longer-term gains in communicative language learning, in socio-cultural understandings and in learning how to learn. Evaluation of these tasks should be based on processes as much as on products.

Extension activities

1. Conservation issues
Sites looking at farming along the Yangtze get into issues in sustainable development, water management and pollution, and certainly this would take students far beyond simply 'viewing' traditional Chinese culture into 'doing' culture (ie developing real cultural understandings) if you link this to the issues we face in Australian ecology and agriculture. Suggested class activities for younger students on the ecology theme

might include: discussions about the native fauna and flora that symbolise a country, eg panda and bamboo for China, kangaroo, emu and wattle for Australia; comparing the ways we protect native animals and plants in Australia and China; questions about illegal trade in animals/birds and the ethics of exporting and importing wild life, with the relevant authorities in each country; Chinese herbal medicine, its plant and animal supply and Aboriginal bush-tucker and medicinal plants. This has the potential to introduce lots of new vocabulary items. Such studies could be integrated with studies of Society and Environment through collaborative approaches by both curriculum designers, and there are certainly media and ecology sites in Chinese language and other environmental-focus sites you can consult on the Internet. I*EARN and other networks have schools all over the world engaged in collaborative projects.

2. Images of air and water

You could look at vocabulary extension through topics of high interest to students, such as white-water rafting, mountaineering, ballooning, which are only just beginning to be seen in China as a destination and contact real companies offering these options. The combination of images of 'air' and 'water' from the river and gorges theme could also lead in a very different direction, to look at images of waterfalls, mountains, bridges, clouds and dragons which are revered in traditional Chinese art, or why balance is such a valued concept in Chinese life and philosophy. This provides another area for vocabulary development and exposure to different kinds of Chinese language texts, such as poetry, scrolls and calligraphy. Kite flying and dragon-boat racing might also be explored in conjunction with the air and water theme, as might written script and calligraphy based on air and water pictographs. Each of these topics leads to different areas of vocabulary and structures in language study.

3. The Yangtze in China's history

The Yangtze has a turbulent political history as a communications lifeline: a brief mention is made of US gunboats protecting against bandits and warlords' armies between 1926 and 1932. Students could be given this as a clue and asked to find out more. Further information on foreign interventions in China could be followed up as an extension of the journey theme, for example imagining following this same course along the river at an earlier date in history, looking more broadly at the significance of the Yangtze at specific times in China's history.

There are also many pages dealing with contemporary economic development in the Shanghai delta, seen as the economic engine for China's future. Comparative study can be made with other port cities around the world and their role in our economic future eg exports and imports through Shanghai compared with a major Australian port can be studied, or trade between China and Australia more generally. Information on Australia-China trade and tourism is available through the Australian government AUSTRADE and DEFAT sites. The recent handover of Hong Kong can be related to this theme, as can the Opium Wars which is a popular topic in senior secondary courses.

4. The Three Gorges

You can look at benefits to China of the Three Gorges dam project and ecological and environmental concerns, for example, in a class letter to the Chinese government about the dam project, or an open letter to the Chinese people via the local media about the need for care for their part of the river. A diagram of a hydro-electric scheme (easily obtained from your physics teacher or from the Internet) could be labelled in pinyin as to how the system works to generate power. This can also exercise the procedural genre (sequenced steps in explaining an operation). Poetry and art on the subject of the Three Gorges can also be integrated into this study, both as language input via reading/viewing and as students' original creations eg writing haiku with illustrations as their own attempt to capture the beauty and strength of the river and mountain gorges.

5. The Long March

The 1934 Long March, as indicated earlier, is an ideal follow up from the journey theme and is an interesting way to introduce Mao Tse-tung and lead into studies on Communism, asking students what they imagine would encourage people to follow a leader on such a daunting journey and beyond. The Chinese language development revolves around vocabulary topics of war, revolution, politics; it can also introduce grammar items eg the way in which Chinese deals with abstract nouns in English (belief, trust, faith, hope) and with past tense in historical documentation and reported speech ('Mao told his people that he would'). It can introduce Mao's own words and historical images to students through Internet or print texts, since many of these documents (also in translation) are available on the Internet as reading resources and photographic archives.

6. My life – your life

A longer term activity which could be woven in to the journey might be engaging in 'my life, your life' exchanges: a group or whole class dialogue (simulated or real) via letter, fax, or email with young people from one of the locations on the map, looking at how aspects of their lives are similar or different; for example, they might start by looking at their own room in their house, drawing a plan or picture of their house to exchange (with labelling in pinyin or script), describing their school day, the food they eat, the sports they play, so that a picture of living in each location emerges over a school term. At the end of this time each student or group could be asked to present the everyday life of their penpals to their class or could design and undertake their own 'journey' to meet their Chinese friend.

Indonesian

K2) **Ayo, berselancar berita Indonesia!**
http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

This is a 5-week collaborative task, written by Sue Elliott, based on researching on-line Indonesian newspapers for ideas to use in the creation of a class home page.

K3) **Indonesian writing task using the internet**
http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

Ten lesson plans, prepared by Anne Helyard, based on researching volcanos in Indonesia.

Japanese

K4) **My family and friends – A task for beginner learners of Japanese**
http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

Four 40 minute lessons developed by Fiona Orrman-Brown. They are "available in both the Japanese script hiragana, with a limited amount of kanji, or in romaji, which may be more suitable for students doing `taster' courses".

Turkish

K5) Quiz

http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

This activity for background speakers, developed by Anna Sperou, requires students to search "for subjects that interest them, with the purpose of obtaining information to use in a Trivial Pursuit-type quiz".

Other

K6) Internet activities for Foreign Language Classes

http://members.aol.com/maestro12/web/wadir.html

This site includes a collection of activities produced by teachers taking part in technology workshops of the California Foreign Language Project and the California Language Teaching Association. It includes activities for Spanish, French, German, ESL, Tagalog, and Japanese. The activity sites provide worksheets which students are to complete by accessing linked sites to find the information required.

L. Interactive tasks – using Chat sites

Chat facilities, through which users can interact in real time by way of written communication, are now available in a large variety of languages. They tend to be more user-friendly than Moos (although this varies greatly), yet by the same token do not offer the same scope for creative interaction given in the best MOOs. We have listed here structured task ideas for school students, an example of an authentic site in the target language country, a creative writing task idea and an Italian Chat collection. Chat facilities are also included in some of the sites described in earlier sections.

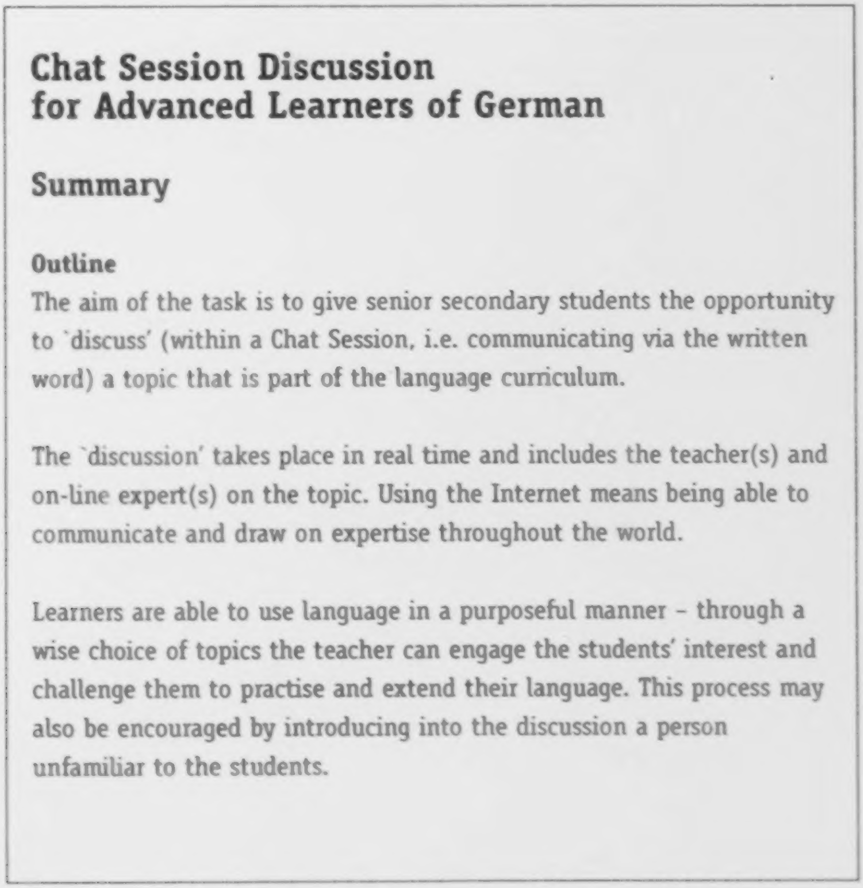
German

L1) Chat Session Discussion

http://www.epub-research.unisa.edu.au/AFMLTA/resgide0.htm

This task was developed by Andrew Ferguson at Trinity College as part of the project referred to in section K above.

Quoted From the Web L1.1:



Chat Session Discussion for Advanced Learners of German

Summary

Outline

The aim of the task is to give senior secondary students the opportunity to `discuss' (within a Chat Session, i.e. communicating via the written word) a topic that is part of the language curriculum.

The `discussion' takes place in real time and includes the teacher(s) and on-line expert(s) on the topic. Using the Internet means being able to communicate and draw on expertise throughout the world.

Learners are able to use language in a purposeful manner – through a wise choice of topics the teacher can engage the students' interest and challenge them to practise and extend their language. This process may also be encouraged by introducing into the discussion a person unfamiliar to the students.

The task involves use of Chat Session opportunities offered through the Association of German Teachers of Victoria's home page (under `Internet Projects'). This Chat Session has been established for advanced learners of German of any age, to encourage language development through interaction with other learners/speakers of German.

Age-group

The task is appropriate for any age-group, but the teacher must carefully choose the topic of discussion to suit his/her students.

World Wide Web Site Address

The site with a URL of *http://www.trinity.vic.edu.au/agtv/* also contains a Hotlinks listing of sites which may provide information relevant to the chosen topic.

Integration and sequencing

Learning Objectives

The learning objective of the task is to extend the use of language in discussion, beyond that which can take place face-to-face in the classroom. The task may be particularly useful for small groups of learners, or individuals, or groups of students, who are isolated from other learners of the language.

The discussion should take place towards the end of the study of a topic, to ensure that students can `chat' confidently, after having practised a range of relevant vocabulary and structures.

Time Frame

The task should last between thirty and sixty minutes.

Linguistic Knowledge

The linguistic knowledge required by the learners to take part in this task will vary considerably, depending on the complexity of the topic. Participants will, however, all need expressions which allow them to express their own opinion, ask others about their ideas, and rebut or agree with others' views. (For this purpose, apart from the language students had gained through study of the topic, the text used was *Brennpunkt*. I also used lists of functional language from the Collins dictionary.)

Differences in Ability

Differences in ability and background are catered for by providing simplified versions of the lists referred to in `Linguistic Knowledge'.

Pedagogical Focus of the Task

The task focuses on reading and writing, but also on different ways of `speaking' and `listening' via the medium of the Internet and the written word – until audio- and videoconferencing facilities are accessible to students in most classrooms, these are being developed as different ways of speaking and listening.

Technological Skills and Knowledge

Students must be confident in keyboarding, as this is the medium of the `chat'. They must also have registered for the Chat Session via the URL given above. Please note that chat sessions are monitored and use of this Chat Session for unsuitable purposes will result in the offending user being banned from the system. There are some basic commands with which participants must be familiar in order to operate within the Chat Session. These are available on-line within the Chat Session.

Facilities and Access

In order to register for the Chat Session, students must have access to an email address. Each student taking part in the discussion must have access to a computer with Internet software.

Advantages of using the Internet

This kind of discussion is only possible at reasonable cost through the Internet, given that most schools do not yet have audio- or videoconferencing hardware and software. The Chat Session is, in my experience, more stimulating for students than a discussion list, which serves much the same purpose. This is because of the real-time interaction.

Evaluation

An analysis of the `discussion' may be useful for teachers and learners, especially to identify any language problems. The analysis of the discussion session could also be used for assessment.

Task description

The teacher must identify a topic that will engage the learners' interest sufficiently to generate lively discussion. An example arose in my Year

11 class recently. This was in the context of a unit of work dealing with lifestyle. In class we had debated the topic `Our diet today is healthy', following reading and listening comprehension, vocabulary and relevant grammar exercises to do with the topic of food and diet. The students were reasonably confident with vocabulary and structures related to the topic and had debated enthusiastically, especially as one of the members of the class is a vegetarian and another committed to eating only organically grown food, while several others are fast-food junkies, by their own admission. They had raised some points in the debate which had remained unresolved and required expertise beyond that which I could personally provide, e.g. nutritional content of specific fast-foods, historical comparisons of quality of diet, food-related diseases.

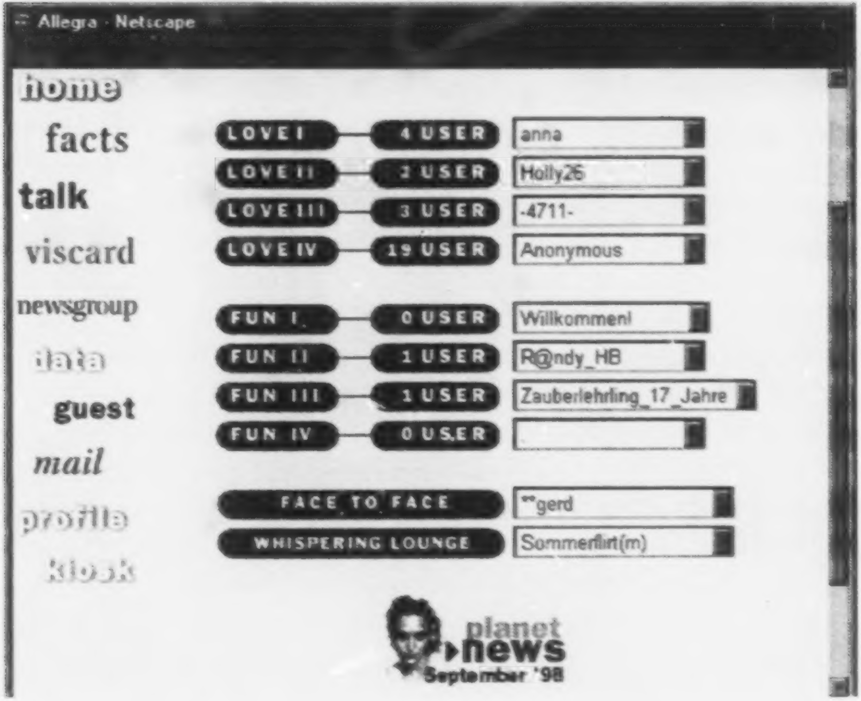
As the next step I plan to contact a German-speaking person on-line who is an expert on the chosen topic. This will involve consideration of time differences, if it is a person based in another country and will depend on his/her availability. I have found that more people are willing to participate in an educational exercise of this nature, because the time involved for them is well defined and reasonable. All participants must be notified well in advance of the time of the chat session and ideally should have had a practice run at using the technology (i.e. have registered successfully and participated in a Chat Session).

Three important points for the teacher to consider are: the involvement of native speakers, the number of participants, and ensuring that all participants `talk'. My feeling is that the involvement of native speakers should be limited and strictly monitored, in order to maximise the benefit to be gained by the language learners. Therefore, a reasonably small number of participants is probably desirable, say between four and ten. The teacher must also be prepared, if participating, to guide the discussion, just as one would in class, in order to ensure that as many learners as possible participate actively.

L2) **Planet Talk**
http://www.allegra.de/talk/index.html

This is one of the most user-friendly chat sites on the subject of love and fun in Germany. There are people on-line at all hours offering instant communication opportunities with native speakers. The best aspect of this site is that it supports extended characters so that the writing is by and large accurate. Interaction tends to be very fast if many people are on-line but users have the option of choosing to respond just to one person. These sorts of sites are ideal vehicles to expose intermediate students to the specific "netspeak" discourse of young people in the target language and can lead to meaningful interchanges. When testing the sites, for instance, I got a severe grilling from one of the 22 people on-line on whether I was really in Australia, and had to give information on population, animals and geography.

Fig L2.1



LOVE I 4 USER anna
LOVE II 2 USER Holly26
LOVE III 3 USER -4711-
LOVE IV 19 USER Anonymous
FUN I 0 USER Willkommen!
FUN II 1 USER R@ndy_HB
FUN III 1 USER Zauberlehrling_17_Jahre
FUN IV 0 USER
FACE TO FACE **gerd
WHISPERING LOUNGE Sommerflirt(m)

ESL

L3) **Jarp Town**
http://elicos.qut.edu.au/village/

"JarpTown is a creative writing experiment 'out on the ICE' (Integrated Cyber Environment). A group of English as a Second Language (ESL) students in Brisbane, Australia have developed a variety of characters which then interact in a village environment built in the cyber community, Connections. The results of these interactions are then turned into narrative writings and posted back on the Web. As the project progresses, it is hoped that the readers of these narratives will be able to 'walk into the community' and in their own turn, join in the narratives." The site was developed by Truna at the Queensland University of Technology.

Italian

L4) **chat italiane**
http://www.dada.it/caffe/chat.htm

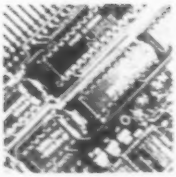
This site lists a collection of Italian chat sites. Students can choose from a variety of chat locations and styles. They can also find recipes, information on tourism, comics, fashion, sport etc. by accessing the caffe at the following site:

http://www.dada.it/caffe/

Most of the chats and sites are in Italian and thus lend themselves to being used for interactive tasks along the lines of those outlined above.

Part 3

Making Sense of the Technology



Part 3 Making Sense of the Technology

A. Introduction to the Internet

1. What is the Internet?

The Internet is the world's largest computer network linking millions of individual computers at different sites ranging from commercial businesses to educational institutions, permanently or semi-permanently connected to each other by land cables and other linkages. The estimated 250 million documents on these computers represent an enormous resource which you can access from your own computer.

The Internet can also be used as a name for the community of people who build and use this global network. It has many of the elements that make up real communities - communal discussion groups, personal places, and resources for playing, working, learning and exchanging ideas (see Turkle 1995 for accounts of personal experiences when interacting in such communities).

2. Joining the Internet

Computer

The first requirement is a computer. While a top end machine is not absolutely necessary, the more powerful the computer, the faster it will run and the more interesting the resources - particularly audio, video, graphics and animations - you will be able to access. Given the rapid evolution of the technology, the best advice is to buy the most powerful machine possible.

Currently, the minimum configuration recommended for access to sophisticated language resources on the Web is a Pentium 200 MMX, with a SVGA monitor, 32 megabyte (MB) of Random Access Memory (RAM), a 1.44 MB Floppy Disk Drive, a hard disk (a capacity of 2.1GB is about the smallest available), and a 24x CD-ROM drive. You will also need a sound card with speakers or headphones to access audio. Most crucially, if you are using an ISP (see *Connecting* below), you will require a 33.6K or faster modem to let your computer talk to others over a telephone line.

If you have an old computer and you are wondering if you can surf the Internet with it, it is not worth attempting on anything less than a 486 DX2-66 with a minimum of 16MB RAM and a 28.8K Modem.

Operating system

The computer's fundamental piece of software is its operating system (OS). Current operating systems include the Windows family, Macintosh (MacOS), and UNIX. The most widely used is Windows, in particular Windows95. Of the other members of the family, Windows 3.1x was never well suited for language or multimedia applications and is fast becoming a thing of the past, while the newly released Windows98 can be expected eventually to take over from Windows95.

Many of the problems relating to languages on the Internet can be solved easily with MacOS. By contrast, Windows95 demands greater expertise. Despite this, the book focuses on the latter because of its dominance in the market. Windows95 is also the system in use at Monash University and this book reflects the knowledge we have gained over two years in getting our laboratory to handle as many languages as possible.

Connecting

The two most common sources of an Internet connection are the internal Local Area Network (LAN) of your own institution or company, and an Internet Service Provider (ISP). Connection through your institution is likely to be faster and more efficient, but connection through an ISP is normal for home Internet users and small companies. This latter requires a modem, normally provided by the user, and some specialised software, normally provided by the ISP.

Access through your institution requires no more than a network card in place of a modem. These cards are usually already in the computer and the only thing that you will see is a cable going to a network socket in the wall.

Of the major ISPs, America on Line is probably the world's best known, and it has subsidiary companies in Canada, Germany, France, the UK, Sweden, Japan, Australia and Hong Kong. It can be found at *http://www.aol.com/* and a list of its international subsidiaries can be found at *http://www.aol.com/info/international.html*

Users in Australia might like to try one of the major Australian ISPs:

- Telstra Big Pond – *http://www.bigpond.com/*
- OzEmail – *http://www.ozemail.com.au/*
- One.Net – *http://www.one.net.au/*

3. Speed and bandwidth

The problem with modems is that they are slow. The rate at which data can be transferred from one computer to another is measured in kilobits per second (KBPS): the more KBPS your equipment can transfer, the faster information can be sent and received. Even today's fast 56K modems are very slow by comparison with the internal network of your institution which may work at a hundred times this speed or more.

Bandwidth is the measure of the capacity of a network connection to transfer data. Different Internet connections provide different amounts of bandwidth, and different types of information (text, sound, video) require different amounts of bandwidth for fast delivery. To illustrate this, the chart below compares the download times of various types of information over two different Internet connections under optimum conditions. The figures can only be approximations, if only because equipment almost never runs at optimum capacity. In addition, many other factors affect the speed at which information comes off the Internet, among them the quality of your ISP's hardware, the capacity of your ISP to handle the volume of traffic at any particular time, the capacity of the server from which you are requesting information, and the geographical location of that server.

Data Type / Relative size	Internet connection – Download time	
	28.8kbps	100kbps
1 page simple text only HTML Document 3kb	0.10sec	0.03sec
Small Graphic (160x120pixels, 256Colours/8-bit, GIF Format) 10kb	0.34sec	0.10sec
Large Photograph (640x480pixels, JPG Standard Format, 65% Compression) 50kb	1.74sec	0.50sec
30sec Audio Clip (WAV format, radio medium quality) 650kb	22.57sec	6.5sec
30sec Small Video Clip (AVI Format, 160 x 120pixels, 16 Bits, 15 Frames/Sec, 34 KB/Sec, MS-CRAM; Audio: PCM,11,025 Hz, 8 Bit, Mono) 1mb	34.72sec	10sec

4. The World Wide Web (WWW, W3, or the Web)

The World Wide Web is a subset of the Internet, and the fastest growing in terms of technology and popularity. There are those who doubt the future of the Internet, but they are likely to be proved wrong: every year, it has grown in popularity and the question is likely to be not whether it will find a place in every home but rather the form that it will take when it does.

One reason for the popularity of the Web is the addictive nature of the vast quantity of materials that it offers: it is like a television with millions of channels running the same program over and over, so that if you want to watch a documentary on the birth of sperm whales at any moment, you can. In addition, the Web is highly interactive (at least potentially), is multimedia-capable with text, graphics, sound and video all on offer, and is the only part of the Internet that can combine all these elements in a seamless and engaging manner.

B. Communication and Interaction

Many users are familiar with one or two aspects of the Internet, but the network has many faces and it is a good idea to get to know the most common of them. These are briefly outlined below, together, where appropriate, with the advantages and disadvantages that each offers for languages. The categories are based on the different computer protocols – that is, the different sets of rules governing each particular mode of communication. There is no one universal protocol covering all forms of communication on the Internet, so computers require different pieces of software to deal with different protocols. This is called client software, a term that reflects the relationship formed between the user and the server computer from which information and service is requested. Luckily for the inexperienced user, the programs that are being run – browsers or e-mail, say – handle the protocols themselves.

1. Transmission Control Protocol/Internet Protocol (TCP/IP)

TCP/IP is the protocol that allows the wide variety of computers on the Internet to communicate with each other. There are other protocols of interest, but TCP/IP is the foundation communications language that a computer has to speak to be able to communicate on the Internet.

Unlike Windows 3.x, Windows 95 has software built into the operating system to handle the TCP/IP protocol for you. It is not installed by default when Windows 95 is set up, but the TCP/IP protocol software should load automatically when you install software enabling you to connect to a network or ISP

2. The address system

As with standard surface mail, an address is required to contact another computer, and each computer on the Internet has an identifying number, name and address. A computer's unique identifying number is known as its Internet Protocol (IP) address. You will probably never need to know these IP addresses – four sets of numbers in a series, separated by periods – because most computers use a host name alias instead such as www.monash.edu.au (the Monash University Web server). The Internet's Domain Name System (DNS) knows which IP address is linked to which name.

To enable users to get to a specific file on a specific computer, the addressing system that maps the location of all documents and files on the Internet provides a Universal Resource Locator (the URL for Monash University is http://www.monash.edu.au and the URL for its FTP server is ftp://ftp.cc.monash.edu.au). A URL consists generally of three parts. The first denotes the protocol of the server being called (ftp://, http:// or Telnet://); the second contains the host name of the server; and the last (if there is anything after the domain name) denotes which part of the server you wish to access (the home page of the Language Centre at Monash is http://www.arts.monash.edu.au/lc/index.html).

Telnet addresses are slightly different, with typical examples Telnet://moo.syr.edu:7777 or Telnet://sol.uvic.ca 6250. Whilst the first two parts are the same as for FTP and HTTP – the protocol followed by the server name – the last does not list a specific directory or file, but gives a Port Number which does the same job of telling the server which area you wish to access.

Server host names can provide useful information about the geographical location of the server (always assuming that the country code is included), as well as the type of information you can expect to find on them. In the Monash host name, for example, *edu* indicates an educational institution and *au* locates the server in Australia. Other common domain types are *com* (commercial organisation), *int* (international organisation), *gov* (non-military government entity), *mil* (military organisation), *net* (network administration), and *org* (other organisations: non-profit, non-academic, or non-governmental). Other examples of country codes are *ca* (Canada), *fr* (France), *uk* (United Kingdom), *ko* (Korea), *jp* (Japan), and *us* (United States).

The code for the United States is rarely used. It used to be a fair bet that the server was located in the US if the host name did not contain a country code, but it is possible for any server anywhere in the world not to have a country code.

3. E-mail: Simple Mail Transfer Protocol (SMTP) and Post Office Protocol (POP)

Electronic mail is easily the most commonly used Internet service. As the name suggests, it is the computer equivalent of ordinary mail and works in much the same way except that everything is done on computers. E-mail client software – Pegasus, Netscape Messenger, Microsoft Outlook and Eudora are all popular examples – allows you to write, address and post letters.

The two protocols associated with e-mail are Simple Mail Transfer Protocol (SMTP) and Post Office Protocol (POP). SMTP is most commonly used to transfer mail between servers, while POP is the protocol used most commonly to retrieve mail from a server.

E-mail can be secured and can include digital signatures. This means that it is possible to send sensitive information over the Internet which only the intended recipient(s) will view. At the same time the recipient can be certain where the e-mail has come from.

Attachments

As with ordinary mail you can send larger files or attachments - word processor documents, images, and even computer programs - with the e-mail. However, e-mail is not the best medium for this. Large files such as long word processor documents, large graphic, audio or video files, or computer programs are best transferred via FTP (see below). The problem with e-mail is that many clients are not configured by default to handle a wide range of file formats. This means that the person receiving your attached file will have to know how to open it on their system, and will need a program capable of viewing that file. Even if nothing more complicated is being sent than a Word document, not everybody uses the same version of Word and earlier versions may not be able to read a document written in a later version.

To make matters worse, some e-mail systems do not handle attached documents at all well. A particularly nasty example converts attachments to an encoded ASCII text file to ensure safe passage across the Internet, but then, if the file is larger than a certain size, breaks it up into a series of packets. The result is the arrival at the other end of several e-mails full of indecipherable code, which need to be put back together using a text editor, then run through a decoder (this requires knowledge of what sort of file it was in the first place), and finally opened with the appropriate software. It is not surprising if this process is beyond the skill or patience of normal users. The safest approach is not to send attachments without first checking that the recipient can open them.

Advantages and disadvantages of e-mail

E-mail is very good for person-to-person communication. It can also be used for one-to-many discussions in asynchronous time through a mailing list server. List servers allow e-mail sent to a single address to be distributed to a list of subscribers to that particular list. For interesting approaches to using e-mail in language teaching, see Austin & Mendlick 1993, Brammerts 1995, González-Bueno 1995, Hackett 1996, Hoffman 1994, Kern 1996, Kimoto 1995, Little & Ushioda 1998, Lunde 1990, St. John & Cash 1995, Teichmann 1994, Van Handle & Corl 1998.

E-mail is capable of handling communications in many languages, but for this to happen it is crucial that clients and ISP servers should be capable of sending and receiving 8-bit MIME compliant e-mail. (MIME - Multipurpose

Internet Mail Extensions – is a set of protocol extensions allowing non-textual materials, such as graphics, binary files, audio and fax to be transferred). This should not be a problem since most ISPs are aware of their customers' need to send non-textual information. The flow-on from this is that extended characters and double byte character sets can also be sent (on these, see Part IV). So make sure that your e-mail client is capable of sending 8-bit MIME compliant e-mail – most new ones are – and that the feature is switched on.

Some of the most popular e-mail clients, including applications like Internet Explorer and Netscape Communicator that have e-mail clients bundled with them:

- Netscape Communicator – *http://www.netscape.com/browsers/*
- Internet Explorer – *http://www.microsoft.com/ie/*
- Pegasus – *http://www.pmail.com/*
- Eudora – *http://www.eudora.com/*

4. Hypertext Transfer Protocol (HTTP) and Hypertext Mark-up Language (HTML)

Running neck and neck for frequency of use with e-mail is Hypertext Transfer Protocol (HTTP). To traverse the Internet using HTTP requires client software called a browser. Mosaic was the first of the modern graphical Web browsers developed at the National Center for Supercomputing Applications at the University of Illinois. While Mosaic is no longer under development, the core of its program code can be found in most of today's popular browsers such as Netscape Navigator, Microsoft Internet Explorer and Lynx. This part of the Internet makes up the World Wide Web.

The primary type of information available on the Web, as the protocol suggests, is hypertext documents. These contain words that are typically underlined and highlighted in a contrasting colour to show that they are linked to some other text. Highlighted text can be selected with a click to retrieve another document from the Web or to jump from one point in the current document to another.

Hypertext documents are written in Hypertext Mark-up Language (HTML). HTML is relatively easy to write using a normal text editor, as the codes used are uncomplicated text-based mark-ups.

However, most documents on the Web today would be better described as hypermedia. As the Web has become more sophisticated, graphics, animation, digital sound and video have been incorporated. All these elements can now provide points of interaction, so you will find yourself clicking on graphics just as readily as on text. For this reason, the term

Hypermedia, which incorporates the concept of hypertext but also includes reference to multimedia (texts, digital sound, video and computer graphics), is more appropriate.

Some of the most popular browsers:

- Netscape Communicator - *http://www.netscape.com/browsers/*
- Internet Explorer - *http://www.microsoft.com/ie/*
- Lynx (a text only browser) - *http://www.fdisk.com/doslynx/lynxport.htm*
- Accent Multilingual Mosaic (a browser marketed as multilingual) - *http://www.accentsoft.com/products/consumer2.html*

If you wish to learn more about the Web, and about HTML in particular, here are a few excellent starting points:

- The World Wide Web Consortium - *http://w3c.org/*
- NCSA — A Beginner's Guide to HTML (NCSA here stands for the National Center for Supercomputing Applications) - *http://www.ncsa.uiuc.edu/General/Internet/WWW/*

5. Newsgroups: Usenet and Network News Transport Protocol (NNTP)

The best analogy for newsgroups (sometimes referred to as News) is a public bulletin board. The system of discussion groups is known as Usenet, and Usenet servers contain thousands of individual newsgroups. Each usually provides information on a single subject and together they cover the whole field of knowledge. Among these can be found newsgroups of great use to teachers, such as those dedicated to specific languages like Chinese or Korean.

Some relevant newsgroups:

- Chinese General Discussion - *news://newsserver.cc.monash.edu.au/chinese.talk.misc*
- French Politics - *news://newsserver.cc.monash.edu.au/fr.soc.politique*
- German Sense of Humour ? Try - *news://newsserver.cc.monash.edu.au/de.talk.jokes*
- Indonesian Culture - *news://newsserver.cc.monash.edu.au/soc.culture.indonesia*
- Italian Language - *news://newsserver.cc.monash.edu.au/it.cultura.linguistica.italiano*
- Korean Art & Design - *news://newsserver.cc.monash.edu.au/han.arts.design*

To read or to post articles on a newsgroup requires client software known as newsreader software which uses Network News Transport Protocol (NNTP). Netscape Collabra (News), Microsoft Internet Explorer-News and Free Agent are some of the best known news clients, though many users of Netscape and Microsoft browsers will not be aware of their existence since the software is built in. You can use a stand-alone newsreader such as Free Agent instead.

When you make a connection to a Usenet server you will be presented with a list of newsgroup topics. Subscribing to a topic should produce a second list of related subject headings. Messages within newsgroups are threaded - that is, they form a linked structure rather like the file structure on a computer. The server containing the newsgroup keeps track of the relationship of each posting to each other posting in the newsgroup. When you access a newsgroup you can read any message in it, post a reply, or start a thread yourself (that is, post a document posing a question or making a statement about the main topic of the newsgroup).

Advantages and disadvantages

Two points that should be made clear about newsgroups is that they are text based, and that they are generally in the public domain. The first point speaks for itself, but the second needs some clarification. It is possible to set up a non-public newsgroup for security reasons but, in general, when you use a newsgroup, you must expect anyone else in the world to be able to see the contents, add posts, and reply to posts. Generally there is little mediation of newsgroups and only Netiquette - the code of conduct for the Internet - governs the way people use them.

Newsgroups can support LOTEs, though many use romanised versions of the languages. This means that you should be able to read and post messages to the newsgroups in other languages provided your computer has the necessary software support. There are a large number of such groups, both national and international, disseminating information of interest to language professionals.

The following is a short list of popular newsreader client software. The Netscape and Microsoft products have newsreader software bundled with them.

- Netscape Communicator - *http://www.netscape.com/browsers/*
- Internet Explorer - *http://www.microsoft.com/ie/*
- Free Agent - *http://www.forteinc.com/agent/freagent.htm*

6. Bulletin Board Systems

Bulletin Board Systems (BBS) are rather like Newsgroups. They are servers set up to exchange messages or data files on specific topics. Users of a BBS generally dial directly into the server, but some are accessible via the Internet. A BBS is likely to have its own customised interface and theme.

(The term has become somewhat confused, and is now often used for any site that provides a service similar in function to the original systems).

Example:

- *http://www.wwli.com/wwwboard/*
  Online Mandarin Chinese Language Course Discussion Forum

7. Internet Relay Chat (IRC)

Language instructors introduced to the concept of a Chat site are typically enthralled by its potential for language learning. There can be many differing interfaces for Chat sites but the principle behind them all is the same - to allow multiple users from multiple locations to discuss a given topic or make general small talk in real (synchronous) time. Some interesting examples useful for language teaching are given in 2:L.

Of particular interest is Internet Relay Chat (IRC), a party line protocol that is freely available and easy to access, and that supports LOTEs. There are a number of large IRC servers around the world on to which you can log locally and which let you chat with people from all over the globe. You can access an IRC server using a Telnet client application, or better still use a purpose built IRC client application like mIRC. Once you have connected to the IRC server you can choose to join a specific chat room or channel, which is an area on the server where a chat is currently in progress, usually on a specific subject. The more exciting aspect of IRC from an educational point of view is that you can add a channel yourself with great ease. It is even possible to add a private channel, which may be preferable for educational purposes.

To find out more about IRC and the client software for this Internet protocol refer to the following sites:

- Internet Relay Chat (IRC) help archive - *http://www.irchelp.org/*
- The mIRC home page - *http://www.mirc.com/*

Advantages and disadvantages of IRC/Chat

The best feature of a chat site is that it allows a conference to take place in real time between geographically remote individuals. However, the amount of space given for typing messages and viewing the conversation restricts the exchange to short sentences. The layout of the screen and the simple fact that you cannot see the others involved in the conversation can cause the discussion to break up and become disjointed if there is no mediation. All of these factors make the medium best for groups not exceeding six or so.

An unfortunate fact is that many chat sites have neglected to allow for LOTEs. This means that accents and other special characters are not supported. It is best, therefore, to check whether a Chat site that looks suitable for language teaching will allow accurate language production. Sites also vary tremendously in user-friendliness, another important element to check. An example of an excellent Chat that is user-friendly and that supports accents can be found in 2:L2.

While IRC is free and easy to access, it comes with one or two drawbacks. Pornographic content providers and other unscrupulous users of the Web often use IRC chat channels as a source of free advertising. The other drawback is that even if you add a channel to the IRC server yourself, it is still possible for anyone cruising around the IRC to join your channel uninvited. With any luck, however, if you set up a channel for Indonesian you will only attract people who are genuinely interested in Indonesian. For these reasons it is worth approaching the administrator of an IRC to see if you can set up a private chat line to avoid the problems. You may also discover that someone has already done this and may be happy to let you join in the chat.

8. File Transfer Protocol (FTP)

FTP is a protocol that allows users to transfer files from their computer to a remote computer and vice versa, and around the remote computer and their own computer. The most common use for the FTP protocol and its related FTP client application is to create and manage Web content remotely, allowing users to send newly created files and documents to their Web site, shuffle them around, rename them, and delete them.

Although casual Web users may think that they are not likely to use FTP, they can come into contact with it through Web browsers, which, though primarily designed to handle HTTP, can also handle FTP. If a binary file – a piece of software or browser plug in – is downloaded, it will in a large number of cases be downloaded from an FTP server since traditionally FTP transfer of binary files was more efficient and less prone to failure then HTTP transfer. It is also possible to browse through FTP servers using most major browser client software.

There are large collections of human language teaching computer resources sitting around FTP servers at major institutions free for the taking. For example you can download from Jim Breen's FTP site at Monash a Japanese word processing package called JWP which links to one of the most comprehensive Japanese/English, English/Japanese dictionaries available for the computer from the dictionary developers:

- Jim Breen's Japanese Pages:
  http://www.rdt.monash.edu.au/~jwb/japanese.html
- Jim Breen's Japanese FTP site:
  ftp://ftp.cc.monash.edu.au/pub/nihongo/

9. Telnet: MUDs, MOOs and others

Telnet

Imagine having a device capable of remotely controlling another computer. You can do anything you like with it: transfer files, change the file configuration, run programs – anything that the owner of the computer allows. This is Telnet, which is both a protocol and an application.

Telnet may seem a simple program, but behind its simplicity lies a series of complex protocol specifications that allow the Telnet client software to control just about any kind of computer on the Internet. This complexity makes it hard to offer a simple explanation of what you can do with Telnet and what it can do.

Further, because Telnet can be used for all sorts of things, computer administration staff may be reluctant to allow full access and may block it off by means of a firewall. (Firewalls are normally employed to keep unwanted intruders from accessing servers with sensitive materials, but they can also be used to confine users to the local Intranet, that is, an Internet limited to a single institution).

Most everyday Net users will not be interested in controlling computers, but they will come into contact with Telnet when accessing on-line databases and/or library catalogues (something of obvious benefit), or playing on-line adventure games (perhaps not of such obvious benefit, but games have their value).

MUDs and MOOs

Multi-User Dungeons (MUDs) are like chat sites, with the added twist that the action takes place inside a text-based virtual environment. You can see where you are, walk around, move from place to place, look at things, pick them up, carry them with you and put them somewhere else – all this to be understood in textual terms, since one significant drawback to Telnet is that it is entirely text based. You only come into contact with other players in the MUD when they are in the same place as you at the same time.

MUDs often go by other names. For example, Multi-User Dungeons Object Orientated (MOOs) contain an object-oriented programming language that users can use to create areas and objects in the virtual environment. Other virtual environments go by acronyms such as MUSH (multiple user shared habitat).

Getting started

Your first experience of a MOO will probably be via a Telnet application, available with Windows 95. To run Telnet, click on the Start button, select Run, type Telnet in the Run dialogue, and press the OK button. If you have never experienced this environment, start with the literature to get a feel for the medium. Then log on to any of the MOOs listed in 2:H. If you want to stick to English first, try the ESL MOO (2:H7) or complete the novice tour in the Victoria MUSH (2:B1). One important piece of advice is to log on at a time when others are on-line: solitary MOOing is an unrewarding experience!

Dedicated software

As with most specific uses on the Internet, dedicated client software is available for MOOs. It will save regular users a lot of time and effort as it usually provides such features as a dialogue field for input which lets you see what you are typing, separate from the terminal window which displays what is going on in the MOO. Most good MOO clients also have shortcut Buttons/Menus/Keys for the most commonly used MOO commands.

Standard commands

The following table briefly outlines some of the key commands used in the standard LambdaMOO server software. We have included these commands as a general guide of the kinds of commands you will have to learn to use in a MOO. It must be stressed, however, that different MOOs and MUDs may use slightly different versions.

Command	for the Action
connect guest	Log onto a MOO
@who	Find out who else is on the MOO
look *object*	Look at the rooms you enter
look *players name*	Look at other players
page *players name*	Talk to someone in a different room
whisper *message* to *players name*	Whisper to someone in the same room
say *message* *"message*	Talk out loud to all in the same room This command is either 'say' or simply open quotation marks. eg. "Hello everybody.
help	Use on-line help
@quit	Leave the MOO (log out)

Note: Sections in italics must be replaced by an appropriate variable. For example, if you want to look at a player called John, type *look John*.

If you are using a Telnet application to interact on a MOO do not be disconcerted by the fact that the commands you type in are not visible. You can change the settings in your Telnet application to echo what you type. However, this setting is sometimes not very successful in some Telnet applications, so you may have to put up with the limitation.

Advantages and disadvantages of Telnet and MOOs

This sort of virtual world is potentially a wonderful tool for language teaching (for suggestions on how to use the environment see Fanderclai 1995, Truna 1995a, Turbee 1996, Unsworth 1995). All the same, the text-based character of Telnet-based on-line applications and virtual environments is a considerable limitation.

In addition, many MOOs available for languages such as French, German, Spanish and Italian are only 7 bit MIME compliant, and will therefore not accept accented characters, using in most cases contrived representations of them or omitting them completely. However, the fault here lies not with the technology but with a misunderstanding of its capabilities since it is possible to send 8 bit characters using most Telnet client software. The apparent cause of the problem is the way the MOO program is set up on the host server. For example, the most common MOO program in use today is LambdaMOOP: it is capable of receiving 8 bit characters but the default condition is that this feature is available only via a complex series of commands. Direct support for 8 bit characters has to be switched on inside the program on the server. As an ordinary user you have no control over this except to bring the oversight to the attention of the people who are running the MOO. Send them an e-mail and suggest they read the manual.

C. Understanding Web Content

While it is possible to surf the Web without understanding exactly what is going on behind the scenes, experience has shown that some basic knowledge will make the experience more productive, more rewarding and less frustrating.

1. Principles of Hypermedia (Hypertext)

The concept of hypermedia is what has made the Web the exciting vibrant cyber-world it is today. It is also what causes newcomers the most confusion. Before hypermedia, if you wished to mine the world's computing resources for files on a specific subject, you would have had to sort through endless file structures in a process a bit like trying to find one specific piece of paper in someone else's filing cabinet.

The basic principle of hypermedia is that parts of a document on the Web - text, graphics or some other form of media - will be marked as links. These can take you to another part of the document or to an entirely different document. In today's Web, a document can be linked to almost any form of computer-based media - Web document (HTML), graphic, word processor document, spreadsheet, database, audio file or video file. Such documents do not have to be on the same server as the original document, but can be on entirely different servers, and in different parts of the world.

The links in hypertext pages may not give you any indication of how big the file you are about to download is, how far away the server housing it is, how powerful that server is, or how long it will take to send the document. Further, if the authors have linked their document to a resource on the Web that is not under their control, they may not always be aware when it is removed from the Web. If you click on a link to a page that has been removed, the worst result you can expect is that the server at the other end will send an error message to your browser.

It is important to remember that the Web is not one computer but many millions of computers all of which are liable to the same ailments as other computers. They can crash, be switched off, or have their file contents changed or restructured. What is more, any of this can happen very quickly: resources that were there yesterday can disappear today and reappear tomorrow. The Web is a series of integrated machines constantly in a state of flux. When you cannot get through to a site, the problem may not even be with the computer you are calling or with your computer but with any one of a large number of intermediaries. Do not assume, therefore, at the first sign of a problem that a site has disappeared, but check back at regular intervals. The Singapore site (2:17), for example, is being rebuilt and may be inaccessible for a while, but will reappear.

2. Browser Basics

While it is not our intention to provide a complete handbook for the Web, or even to provide instructions in the use of any one browser, there are features basic to most browsers that need to be understood if you are to get the most out of the Web.

Location/Address Text Entry Field

This displays the address of the page you are currently viewing. You can also use this area to type in the address of a page for which you wish to look (press *Enter* to go there).

Go Back

A button or command that returns you to the page you were looking at previously.

Go Forward

If you have used the *Go Back* button this button or command allows you to go forward again. The two buttons function like *Undo* and *Redo*.

Reload

Many browsers have a cache which copies the pages you visit along with any directly associated files such as graphics, and stores them on your local system. If you visit the same page again within a relatively short span of time your browser will show you the copy that is on your local system rather than waste time and money getting it from the Web. The *Reload* button is useful if you are visiting a page that you know is updated regularly, since it forces a return to the Web to look for a fresh copy of the current page: if it finds that the page has been updated or altered, it will load the new page; if not, it will reload the cached page.

Home

This button takes you to your Home page - that is, the page on the Web that you have chosen as the page you most often visit. This may be the main page of the institution you work for, or any other desired page (a favourite search engine is one obvious choice). Most browsers provide a place in options/preferences where you can nominate your Home Page.

Bookmarks

Bookmarks (or favourites as Microsoft calls them) are the cornerstone to making the most of the Web. When you find a site that you want to be able to find again easily, bookmarking is much more convenient than writing the address on a piece of paper. The browser places the page you are viewing in a list. Selecting it from that list will return you to the page.

Most browsers store the title of the page with a reference to the relevant URL. However, when you look at the list, all you are likely to see is the page title, which may not be particularly helpful. For example, if you bookmark "The Hebrew Home Page", you will have no difficulties if there is only one such reference in your list, but if you have more than one, it can be impossible to remember where each came from. The solution is that you can edit the titles of the bookmarks in your list without affecting the all-important Web addresses they are associated with.

Most browsers also allow you to sort your bookmarks into categories and sub-categories that will make them easy to find and manage. Check your browser documentation to find out more about this.

Frames

Care needs to be taken with bookmarking when a site uses frames. Frames allow the screen window to be divided into several separate areas, each of which can contain a different Web page. A very common example is where a frame provides a table of contents that brings up pages in another frame beside it. If you bookmark a page deep within a site with frames, you may find yourself next time you visit in the main page and not the page you thought you had bookmarked.

History

The history feature keeps track of every site that you have visited recently (you can usually set how long your history is kept for), in the order that you visited them. So if you remember going to an interesting site that you did not bookmark at the time, you may be able to retrieve it from the history file.

Status Bar

This is usually along the bottom of a browser and contains information about what is going on. There is, for example, usually some indication about the time it is taking for the page you have requested to download. And if you move your mouse over a link in a Web page, the status bar will often display the URL of the linked Web document. This means that, even if there is no indication on the page where the link will lead you, you may be able to find out from the status bar. This process is not guaranteed, since the author can manipulate the text in the status bar and conceal the URL.

Print

This allows you to print the page currently in the browser window. If you are viewing a framed page you must first click on the frame that contains the desired information to select it, and then press *Print*. A page that has a dark background and light writing may be printed as black on a white background to save ink.

Stop

If a page is taking too long to load, or if you decide that you do not want after all to go to the link which you have selected, the *Stop* feature aborts the process.

Show/Hide Pictures

This feature appears to be slowly disappearing. It was prominent in early browsers but is hidden in modern versions, though it can still be found. If you have a slow connection, or if you simply wish to browse the Web without the overhead of large images, you can switch off the display of images until you reach a page where you want see them. At this point, turn the display back on by clicking on the appropriate button or on the *Show Image or Load Image* command in the right-click menu, depending on the browser. This will load the image you are pointing at and every other instance of that image in the current page. Images that you have already loaded are cached by your browser and will automatically show up if they are referred to by another page you visit. Ones you have not viewed before will not.

Search

Despite appearances, *Search* is not a feature of browsers, but of the Web itself. Most browsers have a *Search* button or command, but even if yours does not, you can still use a Web search engine by navigating your browser to a search engine site (enter the appropriate URL into the address input field in your browser). *Search* usually takes you to a site where you can choose from a number of Internet search engines. For further information see the next section.

3. Search Engines

How search engines work

Without search engines it would be very difficult to find anything. They are the library catalogues of the Internet - special Web sites to which you can submit words relevant to a specific subject, and from which you will receive a list of Web pages that match the search criteria. It is not unlike using a computerised catalogue in a library, with the exception that there is no agreed standard for categorising and cataloguing the vast amount of information that is stored on the Web.

Internet search engines do not collect information about all the documents available on the Web. Instead, in most cases the creator or an interested user has to submit the address of the Web site to a search engine. It is checked for suitability, and only then, perhaps, included in the catalogue of that particular search engine (but not of others).

A further limitation is that only the first level of pages is usually included. This means that if this level does not provide good information, the search engine may not list the document at all when you search for it, or may place it far down the list where it may escape notice.

Percentage of relevance

This concept gives some idea of how the system works. Many search engines count the number of times the words you are searching for appear in any document. If you are interested in French grammar, for example, a page that has the word *French* 28 times and *grammar* 32 times will have a higher percentage of relevance, and be listed more prominently, than a page where the two words only appear once. The page with more occurrences will be considered more relevant, even though the page with a single reference to *French grammar* may be the first page of a 200 page complete text, while the other may be a 1 page open letter on a single change to the rules!

Checking the engine

It is impossible to generalise about how search engines work: some are sophisticated and use Boolean pattern searching (AND/OR/NOT), while others are simple and return every document containing any instance of the words for which you are searching. For this reason, when using any search engine for the first time, it is sensible to look at any documentation you can find on it to make you aware of what that particular engine is doing.

Mirrored sites

At first glance the Web might appear to only have a half dozen search engines, all of them in America. In fact, there are thousands all over the world. Many of the popular big ones have a local server in your region containing an exact copy of the content on the main server (this is called mirroring), augmented with specialised local content. Using a local mirror is generally much faster than using the main engine.

Major Search Engines

- AltaVista
  http://altavista.digital.com/
- AltaVista - Australian mirror
  http://www.altavista.yellowpages.com.au/
- Yahoo!
  http://www.yahoo.com/
- Yahoo! - Australian mirror
  http://www.yahoo.com.au/
- Web Wombat Australian Search Engine
  http://www2.Webwombat.com.au/

Both AltaVista and Yahoo provide localised sites for various countries in the local languages. Yahoo's localised sites are linked to the main page of any Yahoo site. AltaVista's are a bit more difficult to find, but try: *http://altavista.digital.com/av/content/services.html*

Specialised Search Engines

Many search engines specialise in specific subjects, including individual languages. The best way to find them is to search for them on another major search engine. Examples of specialised search engines, in addition to the localised sites mentioned above:

- Alku
  http://alku.hrsk.edu.fi/
  Searches Finnish Sites.
- AnySearch
  http://www.anysearch.com
  Korean search engine.
- Globe Page
  http://www.globepage.com/
  Asia search service in English, Chinese GB, and Big 5 encoding.
- MOSHIx2
  http://www.moshix2.net/
  Japanese and English search engine.
- Sesna - Ukrainian Search
  http://sesna.hypermart.net
  Search engine for Ukrainian sites.
- Ugabula
  http://ugabula.com
  Buscador: searches Spanish and Latin sites.
- Zebra
  http://www.zebra.co.za/
  Searches South Africa.

Searching in languages

One difficulty in searching for documents in LOTEs is that many English based engines will assume that you are interested in documents in English. To overcome this, check whether the search engine has a field which allows you to specify the language(s) in which you will accept documents.

A somewhat similar option, perhaps more relevant to browsers than search engines, allows you to chose the language(s) you prefer to view Web pages in. This is particularly useful for Web sites that offer pages in several languages.

4. Colour and Graphics

The moment that the Web became the exciting and engaging medium that it is today can be traced to the creation of the first graphics-enabled browser. However, graphics also pose many questions for Web viewers.

Speed of loading

Some graphics load more quickly than others. This may simply reflect the fact that a graphic from an Australian server is likely to load faster than the same graphic from an overseas server. More seriously, speed will be affected by optimisation - the process of making the file with the graphic as small as possible by including the minimum amount of information necessary. Here, the quality, size, and number of colours in an image all affect the degree to which a graphics file can be compacted. The importance of this is that the size of a file affects the speed at which it can be transmitted across the Web. Since a great deal of the information on the Web is put there by enthusiastic amateurs, it is not surprising if some do not know how to optimise graphics. Others may simply choose quality over optimisation, since the more a graphic is optimised for the Web, the greater is the loss of picture quality.

Sequence of loading

Bits of a graphic may appear while the page is loading or there can be a long wait before the whole graphic arrives. Progressive graphics appear a little at a time, rather like a picture that starts out of focus and gradually comes into focus. By contrast, when a graphic arrives all at once, there may be no indication of its presence until everything has downloaded, although modern browsers display a box where the graphic is going to appear. In this case, the text of the Web page can arrive some time before the graphics. To speed up the process, you can switch off images (see *Show/Hide pictures* above).

Colour quality

Graphics on the Web can be poor – fuzzy and with the colours hideously wrong. One factor in this is the way your computer is configured: if the monitor is set to display only 16 or 256 colours, you cannot expect graphics to look good. Beyond this, there are some issues that developers of Web materials need to take into account when dealing with graphics and colour, since they affect what viewers see.

First of all there have been two different standard file formats – GIF and JPEG – which almost all browsers will show. Some Web developers believe, wrongly, that they have to choose between the two. In fact, each has specific features that make it more appropriate for particular kinds of images. JPEG (Joint Photographic Experts Group) is designed to optimise photographs or any image which contains many subtle changes of colour, while GIF (Graphics Interchange Format) is designed for images like line art or cartoons with large areas of flat colour. Saving an image file more suited to one format in the other produces unpredictable results.

More recently, a third file format – PNG (Portable Network Graphics) – has become available which allows developers to use true-colour 24 bit images. This format is excellent where detail is important, but the files can be quite large, take a long time to download, and can only be viewed in the latest browsers.

Most developers who work with graphics have their computer monitors set for at least 16 bit colour, which gives some 64,000 colours. However most Internet browsers are designed to show no more than 256 colours, and even here, when the differences in the colour palettes of different browsers and different operating systems are taken into account, there are reputedly only 216 colours – known as the Internet Safe Colours – that will reproduce in the same way on all computers. Browsers reproduce the other colours by dithering: they attempt to match the colour by using a stipple effect (a series of tiny dots) of one or two other colours. The result is often unpredictable, particularly with certain colours such as yellows which are not all that numerous in the 216-colour palette to begin with. If developers do not take these limitations into account when creating their Web pages, the end result for the viewer can be visually unpleasant (see Moore 1998 for an illuminating on-line comparison).

5. Sound and Movement

Today's most engaging Web sites go beyond simple text and graphics to include audio, animation and even digital movies. Standards for receiving these are still emerging, so methods, some of which are built in to operating systems and browsers, are varied.

GIF89A animation

Possibly the first form of animation available on the Web was the GIF89a graphics format. Examples, such as little envelopes flying around the earth, turn up everywhere. Most Web browsers show GIF89a animations which are a one-way form of graphical interaction where the viewer cannot control the animation - asking for a section to be repeated, say - and the creator cannot provide hot links in one sequence of the animation and not in another.

One use for GIF89a animations is to show the stroke order for Japanese or Chinese characters. However, the end result is a graphic animation and not characters that the computer can read as text.

Example:

- *http://www.missouri.edu/~c563382/OtherSites/Hiragana.html*
  If you select one of the Hiragana characters in this site, a page will open up inside which you will find a GIF89a animation that shows the stroke order for the character.

Audio

Most browsers can play some forms of digital audio, although in some the audio player has to be installed independently. The advantages of audio in Web-based language learning are obvious, but there are different ways in which it can be delivered.

Standard digital audio files can be hyper-linked to Web pages in the same way as any other form of Web-enabled media. When you click on the link to an audio file, a sound player will open as a separate program. You will then have to wait for the audio file to be downloaded before it begins to play. If the file is high quality or reasonably long (more than a couple of seconds of playing time), it can take anything from a few seconds to several minutes or more to download. Sometimes, too, the sound-playing program will not open immediately, giving the impression that clicking has achieved nothing. All that is happening, though, is that it is taking time for the file to download and be recognised as an audio file, and for the browser to open the sound-player. If you click again, the browser may try to download the file a second time, creating another instance of the sound-player software. Always close the sound player when you have finished listening to an audio file, because every new audio link will open another example of the sound-player program, using up system resources, slowing down the computer and leaving you with a great many programs to close when your Web session is finished.

Embedding

Many developers embed audio files in their Web pages. Embedding is the process by which a non-native Web object (graphics other then JPEG or GIF, audio, video) can have a program that will handle the object inlaid into a Web page. For example, in the case of Web audio, a play button or a play button with a pause and stop button, or even a full audio control panel, can be embedded. For languages, it is possible to have play buttons next to the vowel sounds of the Indonesian alphabet, allowing the user to hear them as well as see them. Here, you will not be left with a multitude of instances of the sound-player left open, but you will still have to wait for a sound file to download in its entirety before it will play. Sometimes an audio file will start to play immediately a Web page is opened. This is another form of embedded audio file which is triggered automatically.

Streaming audio

Streaming is an improvement that allows the sound file to be played while it is downloading. At the moment, you need to install a free plug-in to make it all work but at some point streamed media software for audio and video will probably be included with browsers (for further information on plug-ins, see below). The most widely used standard on the Web for streamed audio is Real Audio and this is one of a handful of plug-ins that are a must for language learning. Unfortunately, installing a plug-in for streamed audio does not mean that all embedded audio on all Web pages will stream: it just allows you to play sounds of the type for which you have the plug-in.

Example:

- *http://www.arts.monash.edu.au/asian_lang_stud/chinese/chinese2/theme 1/reading/index.htm*
  Chinese II for Australia

Streaming Video

Digitised video files can be streamed in the same way as audio files. This is particularly advantageous given the size of video files which typically contain audio information in addition to the moving picture information. Video can be presented in the same way as audio, in linked or embedded mode. In embedded mode, a section of the Web page becomes a stage within which the video is played and the author of the page can select the size of the stage and the controls that are available to the viewer.

Example:

- *http.//thesync.com/features/*
  The Sync: Internet Video Programs - This is not a language site but it contains some classic German digitised video.

Video for Windows

If you have a Windows95 machine and a standard browser you can only really view one type of digitised video file format, Video for Windows (*.AVI). As this is not a common file format, you should get hold of plug-ins for the more commonly used video file formats on the Web such as QuickTime (for QuickTime *.MOV files) and RealMedia (for RealAudio and RealVideo files).

- *http://www.microsoft.com/msgarden/anim.htm*
  Microsoft Complete Gardening: Animation - Netscape users may need to download and save the AVI file before playing it. This is not a language site but it is a stable, accessible example of the technology.
- *http://www.apple.com/quicktime/samples/index.html*
  Apple Products QuickTime - The home page of the software manufacturer contains links to many examples.

D. Beyond Point and Click: creating interactivity

Despite the latest developments, the Web technologies mentioned so far may not seem a huge advance over books and audio and video tapes. This is not entirely true, since the Web offers massive volumes of information at the click of a button, but its greatest strength, and the one that will turn it into an engaging educational tool, is the way it can create interactivity of various sorts.

1. E-Mail

Sometimes Web pages display what appears to be a hyperlink on a person's name – *For more information e-mail John Smith*. This is a mailto link. If your e-mail is configured to work with your browser, a click on the link will open it with the appropriate e-mail address in the send-to field, allowing you to start an e-mail interaction.

2. CGI / Perl / Server Side Programming

An alternative approach is an electronic form inside a Web page. You can fill it out by typing into text windows, clicking on text boxes or selecting radio buttons, and then submit the result by sending the form to a program on the relevant server. In its simplest version, the content of the form will be formatted into an e-mail and sent to a predetermined recipient. Web authors who think that visitors to their site may not have e-mail use this approach so they can still get information or feedback.

The programs run on the servers most commonly use a protocol called Common Gateway Interface (CGI), for which the most common programming language is Perl.

CGI and Perl allow for more than just sending e-mail through the home server of a Web page. For example, information from a form can be sent to a Perl program that will analyse the content and use it to generate a Web page, making CGI a powerful tool for interaction on the Internet. Its one drawback is that the information has to travel to the server before it can be analysed, and then the response has to come back. For this reason, CGI is best for things like Web-based Bulletin Board systems and guest books – that is, for interactions that send information to a central pool that others can then browse through and read. Some other interesting examples of CGI are virtual card and gift sites, and writing fiction where visitors to a site can add to an evolving story.

Examples:

- *http://www.gmsmuc.de/english/look.html*

New College English Dictionary Online

- *http://www.prenhall.com/cheznous/chapter1/deluxe.html*
  Prentice Hall Companion Web Site - Chez nous - Chapter 1
  All of the exercises are CGI based.

3. JavaScript / Basic client side programming

Interactive Web pages will run faster if the client machine does the work instead of the server, and if the data is not transferred until it is in the final form that the author wants. Netscape has now provided an alternative to server-side programming in the form of JavaScript. This may look similar to CGI, with forms presented on a Web page, but JavaScript does not have to wait for the data to be sent to the server but can dynamically change the contents of the page as you are viewing it in response to a variety of interactions.

When JavaScript is combined with CGI, it is possible to produce a question and answer routine that gives feedback with every question as well as a final score. The score and personal details can then be submitted to a server which will provide a page comparing your score with others. In this example, the immediate feedback is provided by JavaScript while the final submission and comparison analysis is done by CGI.

JavaScript has the usual drawbacks of an evolving technology: you need a JavaScript enabled browser (Netscape 2.x or Explorer 3.x and up) to view JavaScript enhanced Web pages, and Netscape 4.05 or Explorer 4.x and up to view pages with the latest JavaScript enhancements. Worse, since Netscape and Microsoft have implemented JavaScript differently, pages developed for one browser may not work on the other.

Examples:

- *http://www.auburn.edu/~mitrege/RWT/Golosa1/index.html*
  Golosa - All exercises use some simple JavaScript
- *http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/index.html*
  Spanish Language Self-Check Exercises - Follow the file tree in the left frame to open an exercise.
- *http://www.missouri.edu/~c563382/Quiz/HiraganaQuiz.html*
  Test Your Hiragana Skills

4. Dynamic Hypertext Mark-up Language (DHTML)

DHTML is the latest addition to HTML. As the name suggests, what was a static language can now be dynamic, with text, graphics, forms and other elements moved, repositioned or made to appear or disappear while you are viewing the Web page.

Web pages enhanced with DHTML can only be viewed with Netscape 4.x or

Explorer 4.x and above. As with JavaScript, DHTML has been implemented differently by Netscape and Microsoft so you will be able to view some DHTML pages properly but not others depending on your browser.

When DHTML and JavaScript are combined, the results can be very captivating. We have even seen presentation tools like PowerPoint replaced to good effect by this lively alternative.

At the time of writing no examples of DHTML were found that encompassed the language learning field. The following reference site, however, contains links to many top quality examples of DHTML:

- *http://www.dhtmlzone.com/index.html*
  Dynamic HTML Zone - DHTML requires the use of Netscape 4.x or Explorer 4.x. Viewing this site with an earlier browser is futile.

5. Java / Advanced client side programming

As if all these forms of computer interactivity were not enough, Sun Microsystems has decided that the Web needs a platform-independent programming language to produce applications that can be distributed across the Web independently or embedded inside a Web page. This programming language is Java - not to be confused with JavaScript, which is separate though complementary.

The basic problem is that functionality and interactivity greater than that available in existing Web technologies require the creation of a computer program. Here, though, the first difficulty is that such programs have to be specifically tailored for each operating system on the Web; the second difficulty is that traditional programming languages create programs too large to cross the Web quickly; and the final difficulty is that these languages can be used to transmit viruses since they can access all the critical parts of a computer such as the memory and the hard disk. Java seeks to deal with all this.

Like JavaScript, Java uses the resources of the client computer and not the server. This is an advantage for developers since they do not have to slow their server down by clogging it up with unnecessary computations, but a disadvantage for users with a slow or under-resourced machine.

To view Java Applets - the name given to Web-based programs written in Java - you will need a Java-enabled Web browser such as Netscape 3.0 or above, Explorer 3.0 or above or HotJava 1.0, which is a browser written in Java, and ensure that Java is enabled in your browser preferences. However, Java has changed since its inception and only the latest browsers can read the latest Applets.

Java Applets can either be embedded in a Web page or can come out of the page and run like a separate program. If they are embedded, you are likely see a grey square occupying the space that the Applet will eventually fill while the Applet is downloading. Applets can be anything from a simple colourful Web page enhancement such as scrolling text, to any form of computer program. The most complex Java Applet we have seen in language learning is Duke University's WebCALIS - a version of their impressive WinCALIS language lesson delivery/authoring software developed with Java.

Examples:

- *http://www.lang.duke.edu/webcal.htm*
  Humanities Computing Facility: WebCALIS Instruction System
- *http://www.seasite.niu.edu/Indonesian/Bacaan/intermed.htm*
  Indonesian Artikel Koran (dan Bacaan Lain) - Selected newspaper articles and other readings.
  Requires Java and Real Audio

6. Helper Applications, Plug-Ins and Embedded Objects

Even before Java, JavaScript and DHTML, it was possible for developers to enhance their Web sites by including links to files that were not strictly Web-enabled documents or media. For example developers could have a word processor document linked to their Web page and include a helper application to give instructions on how to set up a program to use it. Early Web browsers required a list to be edited correlating the file extension with the program you wanted to be opened, but the latest browsers work out which programs you have on your computer and set them all up as helper applications.

One drawback to this approach is that the user may not have a program that will read a particular file format. Another is that it can be an annoying waste of time and resources to click on a hyperlink and have another program open, particularly if all you want to do is to view the document, not edit it. Plug-ins address these concerns.

Plug-ins are applications that allow a non-standard file format - one that is not automatically recognised by standard browsers - to be viewed inside the Web browser window. For example, if a site contains a Word document, you can get a Word Viewer plug-in from Microsoft that will display the linked document inside the viewer. Plug-ins like Word Viewer tend to be free, with their developers making their money from the sale of programs that create the content for the plug-ins to view. Media designed for plug-ins can be embedded into the Web page, launched inside the browser window, or launched as a separate application.

Embedding is the inlaying of a non-standard Web object in a standard HTML page. If you visit a Web page that contains an object for which you do not have the appropriate plug-in you will generally come across a box marking the area where the object should be, and a dialogue box offering to direct you to a site where you can get it. A similar dialogue warning should appear if you click on a hyperlink pointing at a file that is intended to be launched inside the browser or as a separate application, if you do not have the appropriate plug-in. In certain circumstances the browser may offer you the choice of opening or downloading a file if it does not recognise the file format. If this happens and you have no idea what to do with the file, it is best to cancel the operation.

Plug-ins have grown beyond a simple means to fit a non-standard file format into a Web page to the point where some file formats have been created or modified specifically for the Web and have become tools with which authors can create engaging and highly interactive applications that take advantage of the best parts of the original non-standard file format and Web technology. For example, the range of products available under the Macromedia Shockwave banner that have become *de facto* Web standards include tools that are capable of extremely high levels of interactivity, as well as complex courseware style programs that can be embedded seamlessly into Web pages. What were originally non-standard files can then interact with other standard materials making for a dynamic Web experience. For further information see the Macromedia Web site at *http://www.macromedia.com*.

Examples:

- *http://www.arts.monash.edu.au/viet/*
  Vietnamese Online at Monash - This site uses a number of different plug-ins and helper applications.
- *http://explora.presidencia.gob.mx/*
  Bienvenidos: México para Niños - A cute site about Mexico (in Spanish) that uses lots of plug-ins.

Essential plug-ins

The following is a list of plug-ins that we recommend that anyone surfing the Web for the purpose of language learning install on their computer. They are fast becoming *de facto* Web standards and many developers of language-related Web sites are using them. You should install these plug-ins before visiting sites that use them.

- QuickTime from Apple for Viewing QuickTime Movies and QuickTime VR
  http://www.apple.com/quicktime/

- The Acrobat Reader from Adobe for Portable Document Format (PDF) files
  http://www.adobe.com/
- RealPlayer from RealNetworks for RealAudio and RealVideo files
  http://www.real.com/
- ShockWave from Macromedia for Director, Flash and Authorware Files
  http://www.real.com/

Part 4

Getting the language right: text input and output

Part 4 Getting the language right: text input and output

Character sets – reading and writing on the Web

General Introduction

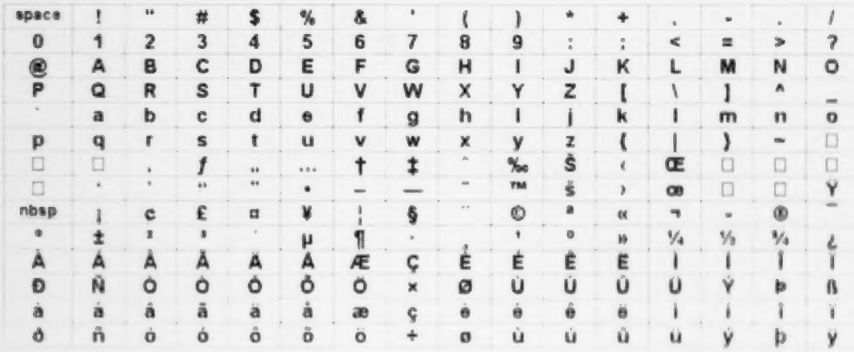
It has taken a long time for technology to meet the needs of language teachers and students, let alone citizens of most of the countries of the world, to have access to languages other than English on computers and across the Web. The delay no doubt reflects the stages of technological development, but it also illustrates the dominant position of English in the computer world. And while advances have been made and are continuing, there is still not a solution for all languages, nor particularly good solutions for important languages like Chinese and Japanese.

Nevertheless, it is now possible, if not always conveniently easy, both to read and to write a large number of languages on a Western version of Windows95, and the following sections provide information on how to do this for a variety of languages. Different languages have different requirements, so they are divided into groups based on the technologies involved. For each group, there is an indication which languages are included, but the names given are illustrative, not a comprehensive list.

Within each section, separate information is provided for reading and writing, though for some languages where it can take a long time to learn how to write the characters into a computer - Chinese and Japanese, for example - the major requirement may simply be to display and read text. Each section ends with more detailed coverage of some of the technical issues which should provide a greater understanding of the processes involved.

A. Extended characters (French, Spanish, Italian, German, Scandinavian languages)

Fig. A1.1



space	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	□
□	□	‚	ƒ	„	…	†	‡	ˆ	‰	Š	‹	Œ	□	□	□
□	‘	’	“	”	•	–	—	˜	™	š	›	œ	□	□	Ÿ
nbsp	¡	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	-	®	¯
°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	¿
À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

By default Windows95 can read and write the Extended ASCII Character Set illustrated in A1.1. Although the set contains 256 (2^8) slots, Microsoft reserves 32 for control characters. The table shows the remaining 224 slots, of which 9 – the empty rectangles – are undefined.

1. Reading on the Internet

No special requirements are needed to read languages in this section. Any of the latest browsers should display Web pages correctly. Any problems are more likely to be the fault of the site developer than of your computer, operating system or browser (but see *Some Known Problems* below).

2. Writing on the Internet

Writing the extended characters to the Internet is not helped by the standard US keyboard. With a total of 48 character keys, 47 of which can be used in shift mode, it is self-evidently not well designed to handle any alphabet of more than 95 characters. So, while all the extended characters may be available, this does not necessarily mean that they are conveniently accessible from the keyboard.

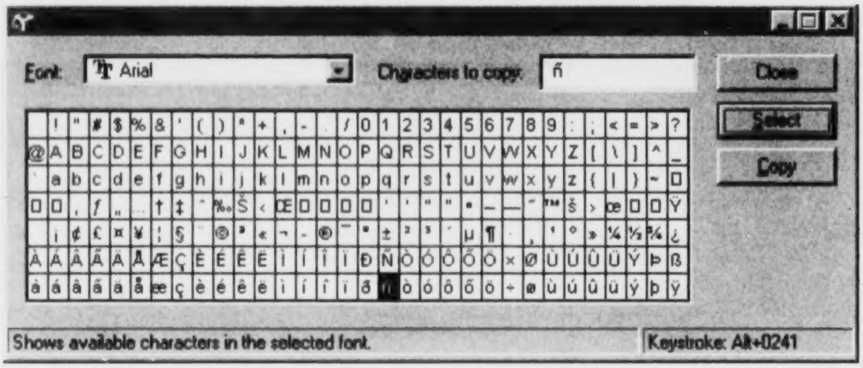
Three methods of accessing the extended characters are available: the Windows Character Map Program, ASCII Character Codes, or Keyboard Remapping Software. The first two methods are cumbersome, but which method you choose is likely to depend on the kinds of Internet applications you wish to use and the frequency with which you need to use the extended characters.

Note that the obvious approach of using the keyboard shortcuts supplied by word processing packages to access the extended characters will not work if the key sequences are not part of the operating system. Typing them in other packages risks unpredictable results. However, it is still possible to use these convenient shortcuts if you have leisure to compose your document before submitting it (writing to Newsgroups or BBS, or filling out forms, for example): write the text with your word processor and then cut and paste it into your Internet client software.

Windows Character Map Program

This application is not installed routinely with Windows but has to be added (see the *Help Index* to find out how to do this). Once the application is installed, have it open at the same time as the Internet client software into which you want to type extended characters, use the *Select* button to choose the character you want from the display (shown in A2.1), press the *Copy* button, go to the client software you are using, and paste in the character (most programs recognize *Ctrl v* as the paste command).

Fig. A2.1


Close
Select
Copy
! " # $ % & ' ( ) * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ?
@ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\ ] ^ _
` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ □
□ □ , ƒ „ … † ‡ ˆ ‰ Š ‹ Œ □ □ □ □ ' ' " " • – — ˜ ™ š › œ □ □ Ÿ
¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ - ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿
À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ð Ñ Ò Ó Ô Õ Ö × Ø Ù Ú Û Ü Ý Þ ß
à á â ã ä å æ ç è é ê ë ì í î ï ð ñ ò ó ô õ ö ÷ ø ù ú û ü ý þ ÿ

Font: Arial

Characters to copy: ñ

Shows available characters in the selected font.

Keystroke: Alt+0241

ASCII Character Codes

The second method is to type in the extended character's ASCII number. For this, you must be inside the software you are using at the place where you wish the character to appear. Hold down the *Alt* key, type the ASCII number for the character you want (on the numeric keypad with the 'Num. Lock' on), then release the *Alt* key. For example, in the Character Map above, the keystroke listed in the bottom right hand corner (Alt 0241) will produce *ñ*. Note that the 0 must be typed: Alt 241 instead of Alt 0241 will produce ± instead.

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The following table is a list of the ASCII reference numbers of extended characters. It can be sensible to keep frequently used ASCII numbers close to the computer.

Fig A2.2

				0127	0128	0129	0130	0131	0132
				□	□	□	‚	ƒ	„
0133	0134	0135	0136	0137	0138	0139	0140	0141	0142
…	†	‡	ˆ	‰	Š	‹	Œ	□	□
0143	0144	0145	0146	0147	0148	0149	0150	0151	0152
□	□	‘	’	“	”	•	–	—	˜
0153	0154	0155	0156	0157	0158	0159	0160	0161	0162
™	š	›	œ	□	□	Ÿ	nbsp	¡	¢
0163	0164	0165	0166	0167	0168	0169	0170	0171	0172
£	¤	¥	¦	§	¨	©	ª	«	¬
0173	0174	0175	0176	0177	0178	0179	0180	0181	0182
-	®	¯	°	±	²	³	´	µ	¶
0183	0184	0185	0186	0187	0188	0189	0190	0191	0192
·	¸	¹	º	»	¼	½	¾	¿	À
0193	0194	0195	0196	0197	0198	0199	0200	0201	0202
Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê
0203	0204	0205	0206	0207	0208	0209	0210	0211	0212
Ë	Ì	Í	Î	Ï	Ð	Ñ	Ò	Ó	Ô
0213	0214	0215	0216	0217	0218	0219	0220	0221	0222
Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ
0223	0224	0225	0226	0227	0228	0229	0230	0231	0232
ß	à	á	â	ã	ä	å	æ	ç	è
0233	0234	0235	0236	0237	0238	0239	0240	0241	0242
é	ê	ë	ì	í	î	ï	ð	ñ	ò
0243	0244	0245	0246	0247	0248	0249	0250	0251	0252
ó	ô	õ	ö	÷	ø	ù	ú	û	ü
0253	0254	0255							
ý	þ	ÿ							

Keyboard Re-mapping Software

Both the previous methods are cumbersome. By far the best solution if you need to type extended characters quickly and frequently is to re-map your keyboard. What keyboard re-mapping does is reassign individual keys to a different character, or otherwise extend the functionality of your keyboard by assigning extended characters to groups of keys, creating the same sorts of short cuts as in a word processor but ones that are available in all your Windows programs.

Standard re-mapping

Windows95 comes with built in keyboard re-mapping software. To find out how to install it, look up *languages, changing the keyboard layout for* in the *Help Index*. The software was designed primarily for users in non-English speaking countries who need a keyboard other than the standard US version. What this means can be seen from the following diagrams which compare the French and US keyboards.

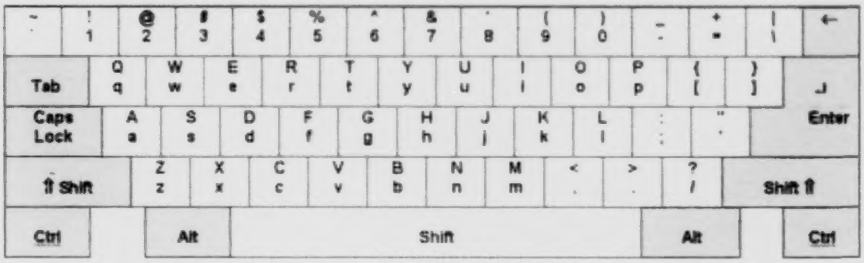
~ ` ! 1 @ 2 # 3 $ 4 % 5 ^ 6 & 7 * 8 (9) 0 _ - + = | \ ←
Tab Q q W w E e R r T t Y y U u I i O o P p { [}] ↵
Caps Lock A a S s D d F f G g H h J j K k L l : ; " ' Enter
⇑ Shift Z z X x C c V v B b N n M m < , > . ? / Shift ⇑
Ctrl Alt Shift Alt Ctrl

Fig A2.3 – Standard US Keyboard Layout

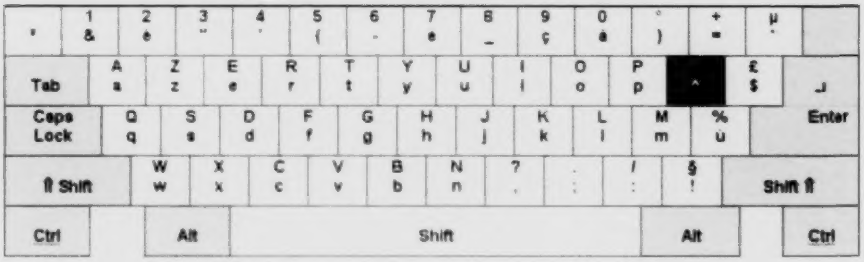
² 1 & 2 é 3 " 4 ' 5 (6 - 7 è 8 _ 9 ç 0 à °) + = µ *
Tab A a Z z E e R r T t Y y U u I i O o P p ^ £ $ ↵
Caps Lock Q q S s D d F f G g H h J j K k L l M m % ù Enter
⇑ Shift W w X x C c V v B b N n ? , . ; / : § ! Shift ⇑
Ctrl Alt Shift Alt Ctrl

Fig A2.4 – Standard French Keyboard Layout

The differences may not seem all that crucial, at least where the alphabet is concerned, since they only involve the exchange of *Q* and *A* and of *W* and *Z* and the re-mapping of *M*. However, a user will also need to get accustomed to accessing the numerals with the shift key, to the remapping of other characters like punctuation, and, most particularly, to ways of producing accented characters.

Some of the latter are directly available, four of them where the English keyboard has numerals. Others – vowels with a dieresis or a circumflex – have to be created by the use of a dead letter key (shown in black). When this key is struck, the cursor does not advance, and nothing will appear on the screen until a second key is struck. If this second key is a letter that can be written with the relevant accent, an accented letter will now appear (to produce *ê*, type ^e); if it is not, the two characters will appear separately.

Keyboard Extension Software

If the switch from QWERTY is likely to be a problem, a better option would be to extend the functionality of your keyboard. One example of such software allows you to assign characters to combinations of keys so that, for example, you might produce the German 'ß' by typing *ss* whilst holding down *Ctrl*. The advantage of this software is that it allows you to generate the extra characters that you need while leaving the rest of your keyboard mapped in the familiar way.

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Further information

Try one of the following URLs for further information about keyboard re-mapping/extending software:

- *http://www.kovcomp.co.uk/Acompose.html*
  Accent Composer – probably the best product for producing extended characters in any program.
- *http://iap.ethz.ch/users/szp/keys/*
  Keys – keyboard re-mapping tool
- *http://www.smartcode.com/products/shortk/shortk.htm*
  ShortKeys 98
- *http://softwareutilities.com/pkindex.htm*
  Perfect Keyboard '98
- *http://www.dtpsoft.de/wksg.htm*
  WinKeySwap (Site in German); see also:
  http://www.dtpsoft.de/
- *http://solair.eunet.yu/~janko/engdload.htm*
  Janko's Keyboard Generator – create your own Windows Native Keyboard Map files

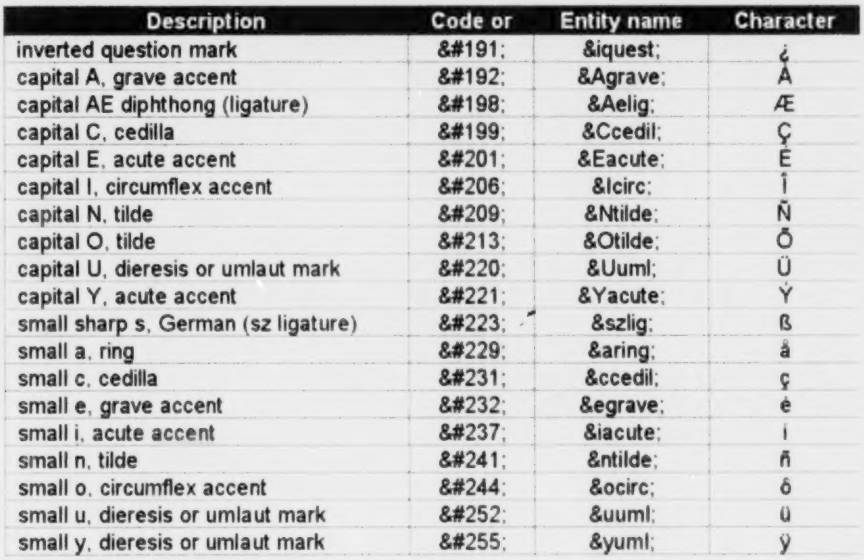
3. Understanding the Technology

Reading on the Internet

Not all operating systems recognise extended characters in the same way as Windows. Furthermore, extended characters sometimes serve non-standard purposes (see *Double Byte Character Sets* below as an important example of this). For these reasons, a standard for representing these characters in the coding of HTML documents has been developed. Each character is represented by '&', followed either by '#' and the ASCII code number for the character or by the ISO 8879 entity name, and ending with ';'. For instance, to represent *à* in an HTML document, write '&#224;' or '&agrave;' (when you read a HTML document in a Web browser you should not of course see these codes but the character they represent). The following table provides illustrative codes for a handful of characters.

It is important to note that this method of representation is specifically for *writing Web documents*. It should not be confused with the way you can produce these characters on your own computer.

Fig A3.1



Description	Code or	Entity name	Character
inverted question mark	&#191;	&iquest;	¿
capital A, grave accent	&#192;	&Agrave;	À
capital AE diphthong (ligature)	&#198;	&Aelig;	Æ
capital C, cedilla	&#199;	&Ccedil;	Ç
capital E, acute accent	&#201;	&Eacute;	É
capital I, circumflex accent	&#206;	&Icirc;	Î
capital N, tilde	&#209;	&Ntilde;	Ñ
capital O, tilde	&#213;	&Otilde;	Õ
capital U, dieresis or umlaut mark	&#220;	&Uuml;	Ü
capital Y, acute accent	&#221;	&Yacute;	Ý
small sharp s, German (sz ligature)	&#223;	&szlig;	ß
small a, ring	&#229;	&aring;	å
small c, cedilla	&#231;	&ccedil;	ç
small e, grave accent	&#232;	&egrave;	è
small i, acute accent	&#237;	&iacute;	í
small n, tilde	&#241;	&ntilde;	ñ
small o, circumflex accent	&#244;	&ocirc;	ô
small u, dieresis or umlaut mark	&#252;	&uuml;	ü
small y, dieresis or umlaut mark	&#255;	&yuml;	ÿ

History of character sets

Early personal computers were fatally limited when it came to handling languages other than English. Their text input/output system was based on the American Standard Code for Information Interchange (ASCII) which is used to represent letters, numbers, punctuation and a few special symbols. Since ASCII is a 7-bit character set - that is, each character is represented by seven binary digits - it can generate a maximum of only 128 (2^7) characters. These are generally those found on an American keyboard and do not include the accented or special characters of even large European languages like French, German and Spanish that use the Roman alphabet.

A big improvement came when IBM introduced its first personal computers in 1981 and extended the number of characters to 256 (2^8) by using 8-bit codes. This extended ASCII character set is large enough to handle most Western European languages with their accented or special characters, along with one or two other languages with written forms based on the Roman alphabet, so from this date there was an easy method, in principle, to deal with these languages.

4. Some Known Problems

While it should be possible to read and write all the characters covered by this section in just about any Internet application, there are one or two problem areas. One - producing extended characters in MUDs and MOOs - was covered in Part 3, B9. Another is the occasional failure of a browser to recognise the HTML code for an extended character. What it then does is print the HTML code in the middle of a word instead of the appropriate character *(3 façons de choisir votre image favorite* appears *as 3 fa&ccdil;ons de choisir votre image favorite)*.

B. Languages requiring alternate 256 character fonts (Greek, Cyrillic, Thai, Vietnamese)

Some languages like Greek and Russian have alphabets with no more than 256 characters (upper and lower case). This means that they are small enough to be fitted into the extended ASCII character set, but they naturally require a different group of characters to handle the different alphabets.

Another group of languages - Vietnamese and Polish are examples - use the Roman alphabet but with many more accented characters than in standard extended ASCII. These, too, are small enough to be fitted into extended ASCII.

The information presented here also applies to languages like Arabic and Hebrew which require no more than 256 characters. There is, however, a special feature that has to be taken into account where these are concerned - they are written from right to left. Problems specific to them are discussed in *Right to Left Languages* below (4C).

1. Reading on the Internet

Because of the special needs of languages in this group, standard extended ASCII is not adequate and special fonts are required. To view these languages you will need to do two things - install the relevant fonts, and configure your software to allow you to use them.

The choices available for most of the languages in this category are to install either Windows Multilanguage Support or third party fonts. Which you adopt is likely to depend on whether Multilanguage Support covers your particular language, and the types of documents you wish to read on the Web.

Multilanguage Support

To install Multilanguage Support, follow the instructions in the *Help Index*. Very good support is provided for Central European, Cyrillic, Baltic, Greek, and Turkish languages.

If you are using Explorer 3.x or 4.x or Netscape 3.x or 4.x, installation of Multilanguage Support should let you explore the Web in any of these languages. When you come across a page in (say) Russian, the browser should recognise the language and reproduce the page correctly - provided, that is, the author has included the appropriate tag. If meaningless garbage appears, you may need to switch to the desired language encoding manually.

To do this, select document encoding by language group name from the Options menu in Netscape 3.x, from the View menu in Netscape 4.x, and from the fonts submenu of the View menu in Explorer 4.x, or click on the flags icon in Explorer 3.x.

Earlier browsers such as Netscape 3.x do not automatically recognise Windows Multilanguage Support, but you can set up the necessary associations manually, by telling your browser which fonts, or which code pages of which fonts, to use. The setup options allow you to associate a language with the relevant font that will allow you to view it

Third party fonts

A different solution will be necessary if you want to view a language that is not covered by Multilanguage Support or if you find that the Microsoft program is not compatible with the pages you are attempting to read. Here, you will need to install an appropriate font for your chosen language.

There are many good repositories of LOTE fonts, free, on the Web (see *Further information* below). To install one see *installing fonts, adding to your computer* in the *Help Index*. Once you have installed it, set up an association between the font and the relevant language in your browser preferences. If your chosen language does not appear there, you will need to use the *User Defined* option to make the association. If you associate a language with an inappropriate font, the results could be unpredictable.

Multiple special languages

An important limitation of the language options of browsers is that the list of languages is not expandable. This creates a particular difficulty if you need more than one extra language, since the leading browsers allow only one User Defined option (and Explorer 3.0 allows none). So what can you do if you need to view both Vietnamese and Thai, neither of which is currently on the encoding list or part of Multilanguage Support? The question is of immediate relevance to language laboratories which are likely to want to configure browsers to view the maximum number of languages.

A slightly cumbersome way of getting around the problem is take advantage of the multi-user feature of Netscape 4.x which is designed to set up preferences for different users of the same software. Create a list of different users and, in their preferences, set the user-defined slot for each to a different language that is otherwise unavailable. This gets around the restriction that there can be only one User Defined option at any one time. As a final touch, it would make things clear if the relevant language were used as a user name, so that User Vietnamese has Vietnamese chosen as the preferred extra language.

Languages in other client software

Defining these language associations and font preferences for your browser should also define them for your News and Mail clients if you are using the latest Microsoft or Netscape client software. If you are using other packages, check the documentation to see how to configure them for different languages.

Other client programs such as Telnet can be configured to allow you to read the languages in this group. The usual method is to use program preferences to change the font used by the program. This way, you can set up your application to view a maximum of one LOTE at a time.

Further information

Some good locations for LOTE fonts:

- *http://babel.uoregon.edu/yamada/fonts.html*
  Yamada Language Center Font Archive
- *http://www.dtcc.edu/~berlin/fonts.html*
  Dr. Berlin's Foreign Font Archive

For further information on Windows Multilanguage Support:

- *http://www.microsoft.com/opentype/multilang/default.htm*

2. Writing on the Internet

If you are using Telnet, Mud, Chat, or any other client program involved in two-way written interaction, or if you want to fill out forms within a browser, you will need to be able to write your chosen alternate font as well as view it.

Keyboard support

To do this, you will need to install keyboard support for your chosen language. Without it, either you will not be able to type your chosen language, or the keyboard layout will make no sense, with any writing you do appearing on the screen as English. Similarly, if you install an alternate font and switch to it in an application without the relevant keyboard support, some or all the characters of the language may appear, but almost never in any logical relationship with the keys on the keyboard. If you are familiar with the Thai, Russian or Greek keyboards, you will know which character should be generated by the letter *a* on an English keyboard, but there is no guarantee that your chosen font will generate it.

There are three ways of providing the keyboard support: Microsoft's Native Language Keyboard Support; third party applications; or a mixture of both with the third party application tweaking the Microsoft application.

Native Language Keyboard Support

To install Native Language Keyboard Support look up *keyboard, layout* in the *Help Index*. After it is installed, a little blue square will appear in the task bar with two initials representing each installed keyboard layout (En = English, Pl = Polish, Ru = Russian). You can switch between keyboards by clicking on this icon and selecting the required keyboard, or by hitting the left *Alt* and *Shift* keys simultaneously.

Keyboard Support completely re-maps your keyboard to provide the standard keyboard layout of the country of origin. This may not always be desirable.

Third party software

If you do not want the keyboard to be re-mapped in this way, or if your chosen language is not supported by the Microsoft program, you may prefer to install one of the freeware, shareware or commercial products available. The scope of this book does not allow us to give detailed instructions on how to install or use these products, but we have provided some references in *Further information* below.

Tweaking Keyboard Support

The third method of customizing keyboard input is to load Keyboard Support and tweak it using third party products. These include alternate keyboard switching software and applications for creating your own Windows style keyboard map files. For further information consult Janko's Keyboard Generator:

- *http://solair.eunet.yu/~janko/engdload.htm*

Summary

While you may need to find a special solution for your individual language needs in some cases, our advice is that your first step should be to install Windows Multilanguage Support and any language-specific fonts required.

Further, you should use either Netscape Communicator 4.0 or Internet Explorer 4.0 along with their associated mail and news programs, as these offer the best multilingual support to date. An added benefit is that these products have been built with many of the current coding incompatibilities in mind and both have code converters that will deal with languages where characters are represented by different coding standards. This means that you only need to install one of these browsers and Microsoft's Multilanguage Support to read pages written in any of the major code standards for a particular language.

Further information

The following sites provide software for reading and writing some of the languages in this section.

- *http://www.fingertipsoft.com/*
  Fingertip Software - Fonts, software, and keyboards for multilingual computing
- *http://www.oeaw.ac.at/~kvk/cte/multik~1.htm*
  MultiKey - Keyboard enhancement for Ancient Greek, Eastern European languages, Hebrew, Arabic etc.
- *http://www.siber.com/sib/russify/*
  Russify everything
- *http://www.nagual.pp.ru/~ache/koi8/main.html*
  KOI8-R - Russian Net Character Set
- *http://www.relcom.ru/Russification/*
  How to russify your client software
- *http://www.kerala.org/fonts/*
  Malayalam Language Fonts, Editors and Publishing Aids
- *http://thaigate.rd.nacsis.ac.jp/refer/windows/thai-ns.html#w95-s1*
  How to view Thai documents on Netscape : Windows - National Center for Science Information Systems, Japan
- *http://thaigate.rd.nacsis.ac.jp/refer/thaiio.html*
  Thai Input/Output - National Center for Science Information Systems, Japan
- *http://www.hri.org/fonts/w95/*
  How to Read, Write, Print and E-mail in Greek - Hellenic Resources Institute
- *http://www.trichlor.org/*
  TriChlor is a non-profit group promoting free Vietnamese VISCII-compliant software and fonts

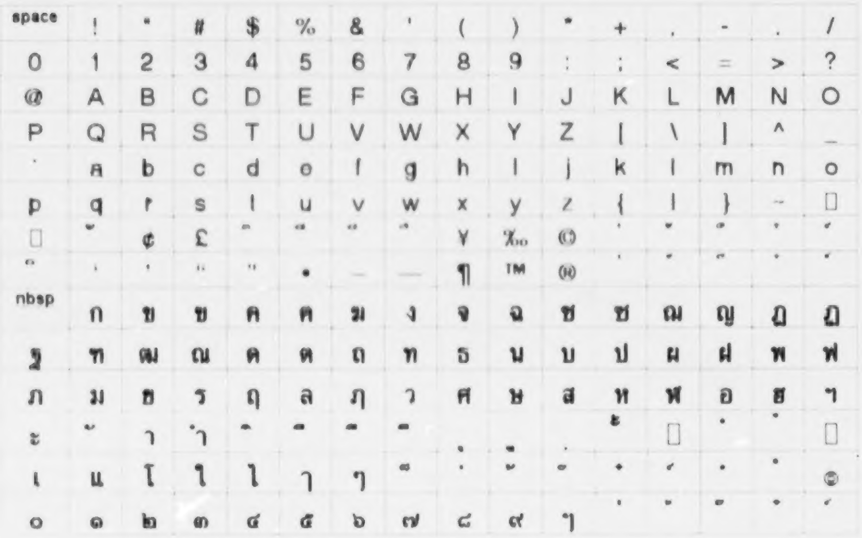
3. Understanding the Technology

To a computer a font is like a conversion table. Every character is related to a numeric code and the correlation of numeric codes and glyphs is called encoding (in a standard Western extended ASCII font, for example, *A* is represented by the numeric code 65).

One problem where languages in this group are concerned is the familiar one of incompatible solutions: many character sets are represented by different encoding systems. The primary distinction here is between systems created before Windows95, and those provided by Multilanguage Support. Before Windows95, encoding systems invariably used a separate font in which some or all the ASCII characters were encoded as other characters of the target language, and no account tended to be taken of the need to produce documents in more than one language with the same font face.

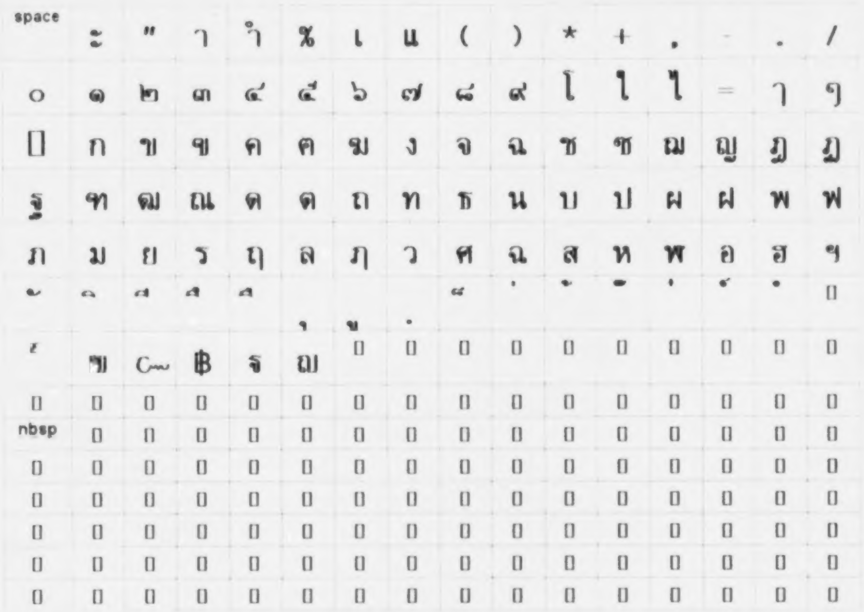
The following diagrams, along with the standard Extended ASCII font (A1.1), illustrate this difference between font encodings. The first is a Thai font that allows for the co-existence of Thai and English characters; and the second a Thai-only font. Typing A will produce an A in the first font (and in standard extended ASCII, of course), but the Thai letter ก in the second. Similarly, typing ASCII code 0161 will produce an inverted exclamation mark in extended ASCII, the Thai letter ก in the first font, and nothing at all in the second.

Fig. B3.1 – Thai-Bangkok Font



space	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	□
□	[illegible]	¢	£	[illegible]	[illegible]	[illegible]	[illegible]	¥	‰	©	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	‘	’	“	”	•	–	—	¶	™	®	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
nbsp	ก	ข	ฃ	ค	ฅ	ฆ	ง	จ	ฉ	ช	ซ	ฌ	ญ	ฎ	ฏ
ฐ	ฑ	ฒ	ณ	ด	ต	ถ	ท	ธ	น	บ	ป	ผ	ฝ	พ	ฟ
ภ	ม	ย	ร	ฤ	ล	ฦ	ว	ศ	ษ	ส	ห	ฬ	อ	ฮ	ฯ
ะ	ั	า	ำ	ิ	ี	ึ	ื	ุ	ู	ฺ	[illegible]	□	[illegible]	[illegible]	□
เ	แ	โ	ใ	ไ	ๅ	ๆ	็	่	้	๊	๋	์	ํ	๎	๏
๐	๑	๒	๓	๔	๕	๖	๗	๘	๙	๚	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Fig. B3.2 – Thai128-Bangkok Font



space	ะ	″	า	ำ	%	เ	แ	(	)	*	+	,	-	.	/
๐	๑	๒	๓	๔	๕	๖	๗	๘	๙	โ	ใ	ไ	=	ๅ	ฯ
□	ก	ข	ฃ	ค	ฅ	ฆ	ง	จ	ฉ	ช	ซ	ฌ	ญ	ฎ	ฏ
ฐ	ฑ	ฒ	ณ	ด	ต	ถ	ท	ธ	น	บ	ป	ผ	ฝ	พ	ฟ
ภ	ม	ย	ร	ฤ	ล	ฦ	ว	ศ	ษ	ส	ห	ฬ	อ	ฮ	ฯ
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	□
[illegible]	[illegible]	C~	฿	จ	ฌ	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
nbsp	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Windows95 ANSI character set

These examples illustrate the problem of font encoding before the development of Windows95. To address the problem of producing multilingual documents where English is the primary language of the document and of the operating system, Microsoft developed the Windows ANSI (American National Standards Institute) Character Sets - sometimes inaccurately called Windows Unicode fonts - as a major feature of its Multilanguage Support. These fonts are also known as 'WGL4' fonts, which stands for Windows Glyph List 4. WGL4 fonts contain a set of 652 characters.

These character sets are a grouping of virtual fonts into one font. All of the virtual fonts in the group (each virtual font is called a code page) have the same face and the same lower 128 character set (the ASCII set). Each code page, however, has its own distinctive upper 128 character set for characters specific to that language.

To illustrate how this works, the table shows some code pages for the ANSI Character Set of the Arial Font, with the language groups they represent.

Fig. B3.3

	Arial Pan Euro	Arial Cyrillic	Arial	Arial Greek	Arial Turkish	**etc.,**
code page	1250	1251	1252	1253	1254	**etc.,**
upper 128	Eastern Europe	Cyrillic	West Euro ANSI	Greek	Turkish	**etc.,**
lower 128	ASCII	ASCII	ASCII	ASCII	ASCII	**etc.,**

The following two diagrams show the code pages for Cyrillic 1251 and Greek 1253, which can be compared with the ASCII font (figure A1.1) which is code page 1252.

Fig. B3.4 – Cyrillic code page 1251

space	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	□
Ђ	Ѓ	‚	ѓ	„	…	†	‡	□	‰	Љ	‹	Њ	Ќ	Ћ	Џ
ђ	‘	’	“	”	•	–	—	□	™	љ	›	њ	ќ	ћ	џ
nbsp	Ў	ў	Ј	¤	Ґ	¦	§	Ё	©	Є	«	¬	-	®	Ї
°	±	І	і	ґ	µ	¶	·	ё	№	є	»	ј	Ѕ	ѕ	ї
А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П
Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
а	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ы	ь	э	ю	я

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Fig. B3.5 – Greek code page 1253

space	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	□
□	□	‚	ƒ	„	…	†	‡	□	‰	□	‹	□	□	□	□
□	‘	’	“	”	•	–	—	□	™	□	›	□	□	□	□
nbsp	΅	Ά	£	¤	¥	¦	§	¨	©	□	«	¬	-	®	―
°	±	²	³	΄	µ	¶	·	Έ	Ή	Ί	»	Ό	½	Ύ	Ώ
ΐ	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο
Π	Ρ	□	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	Ϊ	Ϋ	ά	έ	ή	ί
ΰ	α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ	ν	ξ	ο
π	ρ	ς	σ	τ	υ	φ	χ	ψ	ω	ϊ	ϋ	ό	ύ	ώ	□

4. Some Known Problems

Even after you have set up your browser's fonts and switched over the encoding to the appropriate language, you will still come across scrambled Web pages. The reason is that authors sometimes fail to place a tag in the head section of the document which will tell the browser which character set and/or encoding to use. If this tag is omitted, the browser will revert to the default character set and/or encoding (usually English, ASCII). This is not normally a problem since you can switch the encoding over manually and the page will appear as intended. However many modern Web page writing tools will insert a default tag, which means that there is nothing you can do to stop the page trying to appear as English and ending up as garbage. If this happens, the only solution is to e-mail the authors and let them know that their pages are not coded correctly.

An added complication is that Windows95 Native Language Keyboard Support is intelligent software that will only be activated when the software that you are using can recognize its output. If you are in an application that does not recognize Windows ANSI character sets – browsers earlier than Explorer 3.x and Netscape 4.x – you will be able to switch only between keyboards of languages that use the Extended ASCII character set.

Further, the browsers that do recognize the character sets will still only allow you to fill out a form in the language for which the page is set. This means that if the page is tagged for Cyrillic, only English and Cyrillic languages can be typed in the form. However, if an author writes a page in English and asks you to fill out a form in Greek (as might happen in a beginner's Greek course), you will not be able to type Greek in unless the page has been tagged for Greek.

C. Right to Left (BiDi) languages (Arabic and Hebrew)

[As an introduction to this section on the problems of right to left languages, please read the previous section on *Languages requiring alternate 256 character fonts*].

Computers were designed to write from left to right, not right to left, so they have difficulty handling languages that are not laid out in the standard Western way. This section focuses on languages such as those in the Middle East that are traditionally written from right to left. (While traditional Japanese was written from top to bottom, and some forms of ancient Greek were written from bottom to top, no provision for such languages has yet been made as far as we know).

The major problem with these languages is not, in fact, that they need to be written from right to left but that, when they appear in multilingual documents, some sections may have to be written from right to left and others from left to right. For this reason these languages are called bi-directional (BiDi) languages.

1. Reading on the Internet

To set up your Web applications to view BiDi languages, see the previous section on *special fonts*. You will probably have to install more then one application to view them all, since BiDi languages can use various forms of encoding, with the major difference from other languages being that the encoding will have as much to do with the direction of the writing as the allocation of the letters.

2. Writing on the Internet

To write BiDi languages in a Western version of Windows95 requires third party software. However, even with support for BiDi languages on your operating system there will be a number of things that you will not be able to do, such as using the languages on standard Chat Sites, IRCs or MOOs. Most Telnet based clients and server side software designed for these kinds of applications were developed without BiDi languages in mind.

Further information

The following is a list of links to various sites that can provide you with software for reading and writing some of the languages in this section.

- *http://www1.snunit.k12.il/heb.html*
  Hebrew on the Net (Note: Server appears temporarily unavailable)
- *http://members.tripod.com/~RHANSARI/quran.htm*
  Download Urdu and Arabic fonts

3. Understanding the Technology.

Word order

One fundamental question to resolve when handling these languages is how BiDi text should be stored by the computer. There are two competing choices - logical or visual sequences.

A logical sequence stores and retrieves the text in the same order that it is typed. For example consider the following line of mixed text (example taken from document cited below):

Fig. C3.1 one שתיים three

Remembering that the Hebrew word reads from right to left, the order that this text is typed and read is as follows:

Fig. C3.2 o, n, e, ש, ת, י, י, ם, t, h, r, e, e

Text stored in this order is said to be in logical order. This method requires the operating system and/or software to be BiDi aware - to know that some parts of the text are English and other parts Hebrew. When the computer looks at sequences of characters, it knows how to display them on the screen in the correct written order because control characters tell it which sections are in which language.

The second method of storing BiDi text is visual order - so called because it stores the text in the same sequence as it would appear on the screen. In this case, the example text would be stored as follows:

Fig. C3.3 o, n, e, ם, י, י, ת, ש, t, h, r, e, e

In both cases, the words are typed in logical order and displayed appropriately. The first approach stores the words as typed and flips them as required when it prints them out. The second approach flips them as required before storing them.

Logically ordered text is easier for an end user to edit, making this the preferred method.

Paragraph order

The situation becomes even more complex when we deal with extended multilingual texts. Here, a decision has to be taken whether the paragraph is written from left to right or from right to left. The rule is that the direction is governed by whichever language is predominant. So if a passage is mostly in English with just a smattering of Hebrew it should be displayed from left to right as follows:

Fig. C3.4 one שתיים three

On the other hand, if the predominant language is Hebrew then the same sequence should be displayed from right to left:

Fig C3.5 three שתיים one

Note that the individual words retain their proper order: the only issue here is whether the text should start at the left or the right.

What this means is that any program that handles BiDi text must have a method for handling paragraph direction as well as text direction

4. Some Known Problems

Web browsers on the whole are unaware of BiDi text. Microsoft has implemented a customized extension to HTML which allows the direction of a paragraph to be stated, but this tag is recognised only by the Middle Eastern versions of Internet Explorer.

There is no certain way of reading and writing BiDi languages on the Internet. The latest version - 4.0 - of HTML and future releases of the leading Internet client software are rumoured to include features that will solve this problem.

Further information

Information in these sections has been taken from:

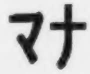
- *http://www.tau.ac.il/~danon/Hebrew/HTML_and_Hebrew.html*
  Hebrew in HTML Documents: Doing it Right, Gabi Danon, January 1998

D. Double Byte Character Sets (Chinese, Japanese and Korean) and Input Method Editor (IME)

Chinese, Japanese and Korean (CJK) pose a particularly difficult problem for computers with a set of only 256 characters since all three languages far exceed this limit (basic Japanese, for example, has over 6,000 characters).

The most common method of producing CJK characters within Windows95 is a system called Double Byte Character Sets (DBCS). Two extended ASCII characters in combination are used to represent a single CJK character (8 bits equal 1 byte, hence the name). Software interprets the Double Byte code and produces CJK characters on the screen - for example, 'ÏÀ' in combination might represent the following Japanese character:

Fig. D0.1



1. Reading on the Internet

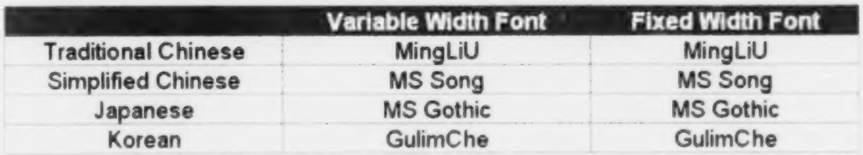
The user again has a choice between Microsoft software and third party alternatives.

Microsoft support

From Internet Explorer 3.x onward, Multilanguage Support has been available for CJK. It can be downloaded from the Microsoft Web site for Explorer 3.0, or is available as part of the installation process or as a live update (installation across the Internet) for Explorer 4.x onward.

For Netscape Navigator (Communicator) 4.0 or above, it is possible to install CJK Multilanguage Support without also installing Internet Explorer 3.x. After installation, point Netscape's preferences at the appropriate Microsoft fonts:

Fig. D1.1



	Variable Width Font	Fixed Width Font
Traditional Chinese	MingLiU	MingLiU
Simplified Chinese	MS Song	MS Song
Japanese	MS Gothic	MS Gothic
Korean	GulimChe	GulimChe

Installing Microsoft's CJK will also allow you to read e-mail and news groups in Netscape 4.x or above, and Internet Explorer 4.0 or above.

Third party software

If you are using an earlier or different browser, you will probably need to run an application in parallel with your browser to provide double-byte viewing support. You may also prefer to use a third party product if you do not like the Microsoft fonts. Many such products are available. In most cases, it is a simple matter to install them and make a few changes to the options in your applications to gain CJK support in e-mail, news readers and browser client programs.

2. Writing on the Internet

To write CJK, you need to install IME (Input Method Editor) software for Chinese, Japanese or Korean. While the best IME software is still only available from third party vendors, Microsoft recently released two free packages which allow the input of Japanese and Korean characters into forms in Internet Explorer 4.0 and Outlook Express 4.0 (e-mail). If you are a Netscape user or wish to input Chinese you will still have to download a third party application at present.

Many such packages are available for all three languages. They are easy to install, and normally let you view as well as input CJK. The best ones will allow you to write not only in your browser but in most of your other applications as well.

For detailed information on how Chinese, Japanese and Korean IME software works, refer to the reference materials and home pages of the IME application developers below.

Further information

Sites providing software for reading and writing CJK languages:

- *http://www.microsoft.com/ie/most/howto/?/ie/most/howto/multi.htm*
  Microsoft – Internet Explorer (3.0) supports a wide variety of languages
- *http://www.njstar.com/*
  NJStar Software Corp
- *http://www.twinbridge.com/*
  TwinBridge Software Corporation
- *http://www.unionway.com/*
  UnionWay International Corp.

3. Understanding the Technology

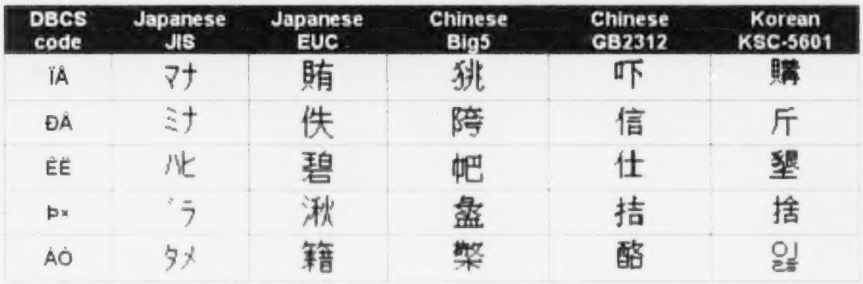
As stated earlier, Double Byte Characters are created by using an encoding system based on two single byte (8 bit) characters and then interpreting the two characters and replacing them with one CJK character. In addition, the software has to take care of the distance between characters and lines of CJK text on the screen.

This solution is not complete, however. The DBCS encoding standards for CJK languages were all originally developed independently, and were furthermore created with bilingual document creation in mind, English being the other language. For this reason, the lower 128 characters of Extended ASCII were not used as the first of the two bits, greatly reducing the number of codes available. As a result, not surprisingly, the same code is often used to represent different characters in Chinese, Japanese and Korean. More confusingly, the same code may represent different characters in differing encodings of the same language.

An idea of the problem can be gained from the following table which compares a series of double byte codes in differing encoding standards. It was created using Internet Explorer 3.0 with Multilanguage Support for Japanese, Chinese and Korean. Some of the encodings may make no sense in the target language as the table lists a random selection of codes which may or may not be used by all the encoding standards represented.

Note There is another encoding standard called Shift JIS which is different from the JIS listed in the table. It is 7 bit MIME-compliant and designed for e-mail.

Fig. D3.1



DBCS code	Japanese JIS	Japanese EUC	Chinese Big5	Chinese GB2312	Korean KSC-5601
ÏÂ	ﾏﾅ	賄	狣	吓	購
ÐÂ	ﾐﾅ	佚	陓	信	斤
ÊË	ﾊﾋ	碧	帊	仕	墾
Þ×	ﾞﾗ	湫	盠	拮	捨
ÀÒ	ﾀﾒ	籍	槃	酪	잃

4. Some Known Problems

One of the most common problems when viewing or writing DBCS rises from split double bytes. Double Byte codes are not a natural function of Windows95, and the operating system and applications are mostly Double Byte Unaware. As a result, most text viewing/editing packages will see DBCS in their original form as strings of Extended ASCII code, not as CJK characters. This means that if the author of a document that uses DBCS is not careful about the way the pages are laid out, the string of code can wrap round at the end of a line in the middle of a character and produce bizarre results. For example, in Japanese JIS, the code string for *greeting* looks like this:

Fig. D4.1 ´¿Á÷·Þ²ñ.

and the resulting output should look like this:

Fig. D4.2

歓送迎会

If one of the DBCS codes gets split in half the result can be meaningless:

Fig. D4.3

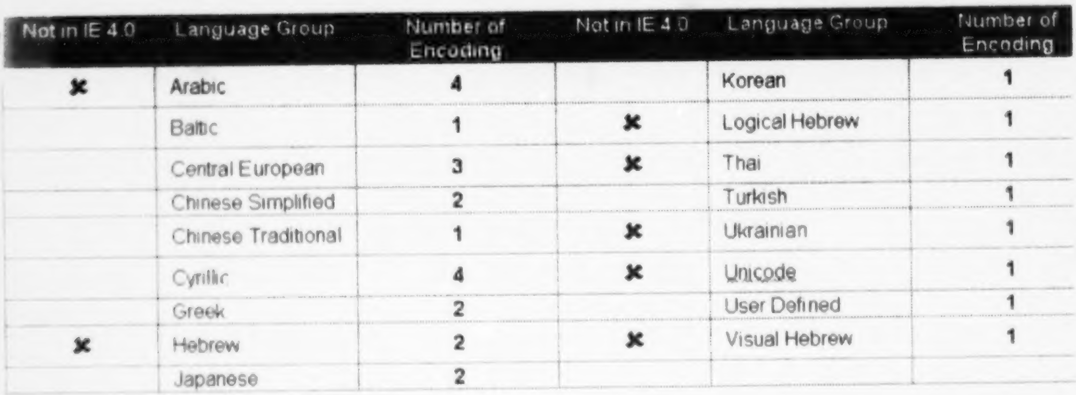
歓送キ
滑 ■

If you find this problem at a particular Web site, but not at others, when you are using the same encoding settings in your browser, then the problem is probably not with you but the site. E-mail the owner to say that you are having difficulty viewing the page. If you are using a DBCS enabled e-mail package or other application, and wish to make sure that the recipient will not encounter this problem, it is best to manually insert line breaks every 40 DBCS characters at most.

E. Stop Press: Explorer 5.0

At the time of writing, Microsoft's Internet Explorer 5.0 had not yet been released, but a review of a pre-release beta version suggests that Multilanguage Support for the browser, e-mail and newsreader has been expanded. It offers more extensive document view encoding, along with IME support for Chinese as well as Japanese and Korean. The only problem is that all the menus in the IME applications are in the target language! The following table shows how far Microsoft has extended Internet Explorer's multilingual viewing capacity in this soon to be released version (*Number of encoding* refers to the number of differing encoding standards supported for each language group).

Fig. E0.1



Not in IE 4.0	Language Group	Number of Encoding	Not in IE 4.0	Language Group	Number of Encoding
✗	Arabic	4		Korean	1
	Baltic	1	✗	Logical Hebrew	1
	Central European	3	✗	Thai	1
	Chinese Simplified	2		Turkish	1
	Chinese Traditional	1	✗	Ukrainian	1
	Cyrillic	4	✗	Unicode	1
	Greek	2		User Defined	1
✗	Hebrew	2	✗	Visual Hebrew	1
	Japanese	2			

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F. The hope for the future: Unicode

The best answer the computer world has come up with to the problem of mixing several languages in a single document is Unicode. Created in 1992, Unicode uses a 16-bit code, which allows it to handle a much wider range of international characters – more precisely, 65,536 (2^{16}) of them. The Unicode standard currently supports many of the principal written languages of the Americas, Europe, Middle East, Africa, India, Asia, and the Pacific region. The table lists the primary scripts that it already supports.

Fig. F0.1

- Arabic
- Armenian
- Bengali
- Bopomofo
- Cyrillic
- Devanagari
- Georgian
- Greek
- Gujarati
- Gurmkhi
- Han
- Hangul
- Hebrew
- Hiragana
- Kannada
- Katakana
- Latin
- Lao
- Malayalam
- Oriya
- Phonetic
- Tamil
- Telugu
- Thai
- Tibetan

Some 60 or so language scripts have not yet been included in the Unicode standard, among them Balinese, Burmese, Ethiopic*, Javanese, Khmer (Cambodian), Northern Runes*, Ogham*, Sinhala (Sri Lankan)*, South Arabian and Tagalog, but the asterisked languages have been accepted for future inclusion.

Unicode is simply a standard for the storage of characters It does not of itself make a computer multilingual, but it provides the capacity for programmers to access a full range of characters.

At present Western editions of Windows95 do all of their internal character processing using local 8-bit, not 16-bit, character sets. This does not seem to prevent applications from processing Unicode character strings, and Unicode based applications can be run on Windows95. However, at some stage the program may need to translate the 16-bit character coding to 8-bit coding or *vice versa* to pass it through portions of the operating system. This is not desirable and it is hoped that trends in Windows will see the eventual development of a platform that will handle all text as Unicode 16-bit strings.

Unicode is an improvement on Double Byte Character Sets in that each of the codes uniquely identifies a single character. The resultant font of 65,536 characters is not only vastly greater than the Extended ASCII font of 256 characters, but also greater than the total number of characters available in DBCS. The limitations of DBCS mean that languages such as Japanese and

Chinese may not be able to appear in the same document at the same time. By contrast, a Unicode document could contain text in Chinese, Japanese, Korean and English simultaneously. Further, there would be no doubt as to which sections were in which language, whereas DBCS documents without any indication of which language they are written in might be Chinese, Japanese or Korean, and might anyway be in one of several different encodings within each of those languages.

Further information

For further information on Unicode visit the official Unicode site:

- *http://www.unicode.org/*
  the Unicode Consortium Web site

G. Other Language Representation on the Internet

There are ways of working around the problems of representing characters that are difficult to produce in Web documents. What follows is a short list of some of them to give you a better understanding of some of the strange things you may see.

1. Romanisation

The most common method for LOTEs is an ASCII-based phonetic or romanised version of the language, using the 128 characters of the ASCII character set in a phonetic way. A simple example would be to write the German character *ß* as *ss;* a more complex one to use romanised forms of Japanese or Chinese, with the long vowel sounds of Japanese and the tone vowel sounds of Chinese replaced by an ASCII compliant notation (for instance the long vowel sound *ō* may appear as *oo*). This results in a false impression of the written language for the student unless the intention is to teach romanised forms.

2. Graphics

The second most common method is to use graphics to replace individual characters, particularly phonetic characters used in the romanisation of Asian languages that are not readily available in any standard font set.

There are many drawbacks to this. Not only will the page not make sense when read with a text-only browser or one with the graphics switched off, but strange things will happen if your browser is set to read pages in a font different from the one the developer used, or if you increase or decrease the font size. Changes to the font will make the "letters" in the text that are graphics very apparent!

Graphics also take much longer to download in a graphic-enabled browser than the same amount of plain text.

The use of graphics may seem a reasonable solution if the developer's only alternative is to get you to download a specific font before you can look at the page. However, the disadvantages are such that graphics should only be used for obscure character sets. Anybody who is serious about a language is unlikely to mind downloading a font.

3. Audio

A number of Web sites try to compensate for the lack of support for a particular language by using English and a large number of audio files, since it is easier to produce audio for the Web then to support some character sets. This approach will often hide a lack of technical knowledge or an inability to come to terms with the limitations of the Web. More effort on the developer's part to track down or create appropriate character set resources would save the user a lot of time waiting for audio files to download.

4. Alternate File Formats

Another method is to produce word processor documents with fonts embedded in the file. Applications such as Word for Windows allow documents to contain information about the fonts with which they were created, and such documents can be attached to e-mail, downloaded from FTP sites, or linked to a Web page. If you have the viewer plug-in for that word processor, you can read the document in your browser. A relatively seamless link can thus be created between the Web and the word processor document. This is a valid way of doing things even though word processor documents are usually much larger than HTML documents containing the same text.

This method will probably not work for documents in DBCS languages, though it is possible to open documents created by Japanese Word with an English version of Word 7.0 as long as you have the same fonts as those used to create the original document. This is true for all localised versions of Word except BiDi versions.

A limitation on this method is that most word processor documents restrict the number of embedded fonts possible: in particular, the Western edition of Windows95 and Word 7.0 will not read a document from a Middle Eastern or Asian edition.

5. Portable Document Format

One technology stands out for the distribution of documents in LOTEs – Adobe's Portable Document Format (PDF). PDF allows Web developers to create a document in almost any application, using any character technology or font as long as it is printable. If the document is printed to a PDF file, this file is guaranteed to be viewable in the Adobe Acrobat PDF Reader exactly as it was created.

This means that developers can use, say, an obscure Japanese character coding system and their own customised fonts, but, as long as the resulting file is printable on their system, all they have to do to let you see it is create a PDF file. All the user has to do to read the original, without a DBCS handler application or special fonts, is to download and install Acrobat Reader from Adobe's Web site. Since PDF files can contain graphics, hyperlinks and even Web-enabled forms, it is possible to use them to build an entire Web site.

Offsetting the great advantages of the technology is the significant drawback that PDF files are huge by comparison to HTML documents.

Further information

For more information on PDF see:

- *http://www.adobe.com/prodindex/acrobat/*
  Adobe Acrobat – Adobe systems incorporated

6. Embedded Fonts

The last approach does not really belong to the category of somewhat spurious techniques, or of technologies that are not Web standards. Embedding fonts in Web pages is something of a Holy Grail for language developers, and it is only very recently that it has started to become a reality.

Font embedding means that when you request an HTML document from a server, the fonts with which the page was created come along with the Web page.

The obstacle is the normal commercial one, with two contenders competing to establish a standard – a Microsoft solution currently only viewable through Internet Explorer 4.x and above, and one from Bitstream called TrueDoc which can be accessed by Netscape browsers 4.0 and above, or, with an Active-X plug-in, in Internet Explorer. The Microsoft product is free, while developers who want to use the TrueDoc product which has a greater potential audience have to purchase a TrueDoc enabled Web development tool, only two of which exist so far, both of them for the Macintosh platform! There is a solution for Windows95 currently under development, but users are likely to have to wait a little before a viable solution is freely available.

Further information

For more information on TrueDoc technology see:

- *http://www.truedoc.com/*
  truedoc.com – The Web Typography Center

More Thanks

I would like to thank the following people for contributing in one way or another:

Pavlos Andronikos
David Joshua Askew
Rie Askew
Rachel Birati
Carmen Cabot
In-Jung Cho
Young-A Cho
Kerry Dunne
Christine Eckhard-Black
David Elder
Richard Elliot
Jason Emmet
Ria Hanewald
Kasumi Hatasa
Pete Jones
Raffaele Lampugnani
Joseph Lo Bianco
Alexandra Ludewig
Carol Macknight
Sarah Mann
Gabrielle Markus
Brian Nelson
Colin Nettlebeck
Bert Peeters
Stephan Pohlmann
Margaret Riordan
Ruth Rosen
Angela Scarino
Marie Sierra
Sally Staddon
Paul Thomas
Dave Tout
Adriano Vincentelli
Diane Westerhuis
Nic Witton

Appendices

Appendix 1

Useful sites for ESL/EFL/TESOL

CTI TEFL/TESL Sites
http://www.hull.ac.uk/cti/langsite/tefl.htm

An interesting collection of sites maintained by Fred Riley at the University of Hull.

DigiEnglish
http://digienglish.org/digienglish.htm

This site provides links to interesting resources for teachers and students including links to some interactive exercises. Maintained by Andrew Taber.

Dave's ESL Cafe On The Web!
http://www.eslcafe.com/
http://www.pacificnet.net/~sperling/

Feature pages of this site, maintained by Dave Sperling, include ESL Cafe News, Bookstore, Chat Central, Discussion Centre, FAQ, Graffiti Wall, Help Centre, Hint-of-the-day, Slang, Quiz and much more.

The TEFL farm
http://www.teflfarm.com/

An on-line magazine for teachers and lovers of English. Includes articles, features, reference material, editorials, news, reviews, letters, interviews, forum, curios and much more. Maintained by Sab Will.

Guide to Grammar and Writing
http://webster.commnet.edu/HP/pages/darling/grammar.htm

A grammar guide which includes interactive quizzes and tips on writing paragraphs and essays. Maintained by Charles Darling.

The Lingua Center Grammar Safari
http://deil.lang.uiuc.edu/web.pages/grammarsafari.html

This site suggests using the Web, in a task-based approach, to give students hundreds of examples of any English words they choose as they are used in authentic communication. The site was developed by Doug Mills and Ann Salzmann at the Intensive English Institute at the University of Illinois at Urbana-Champaign.

Exchange!
http://deil.lang.uiuc.edu/exchange

An on-line magazine, coordinated by W. Jason Stegemoller at the University of Illinois at Urbana-Champaign, that publishes writings on various cultural topics by non-native speakers from around the world.

English on the Internet
http://eleaston.home.mindspring.com/html/english_on_the_internet.html

A useful resource page, by Easton Language Education, for teachers who want to use the internet. It contains links to sites on using the internet, technology, teaching materials etc.

Tower of English
http://members.tripod.com/~towerofenglish/index.htm

Features include on-line ESL courses, tower tutors, free message board and chat rooms.

Pizzaz!
http://darkwing.uoregon.edu/~leslieob/pizzaz.html

Pizzaz, by Leslie Opp-Beckman, is a website which provides creative writing activities for students and includes other resource materials for teachers of ESL.

TESL/TEFL/TESOL/ESL/EFL/ESOL Links
http://www.aitech.ac.jp/~iteslj/ESL3.html

Links of interest for students and teachers of English as a second language

Englishtown - Learn English Online
http://www.englishtown.com/English/default.asp

This is a useful site for teachers and students. Features for students include games hall, two chat sites, link yard, grammar gallery, story stage, and a culture coaster. Features for teachers include a lesson lounge and a brain bar.

The Secret Diaries of Lotus and Rose
http://www.cityu.edu.hk/ls/lotus&rose/

A WWW soap opera for the subversive teaching of English, created by Ken Keobke at the City University of Hong Kong.

English Online (eleaston)
http://www.geocities.com/Athens/Crete/4634/english.html

A site listing links to on-line resources for teaching and learning English. Maintained by Easton Language Education.

Online ESL/EFL Resources
http://www.study.com/resources.html

Another site listing links to on-line resources for teaching and learning English.

English as a Foreign Language Magazine
http://www.u-net.com/eflweb/

An on-line magazine for teachers and learners of EFL.

ESL on the Net
http://www.nceltr.mq.edu.au/eslnet.htm

The National Centre for English Language Teaching and Research, Macquarie University, has put together this collections of links to ESL on the Net.

Appendix 2

2.1) Selected links pages for languages in general

Comprehensive Collections

A Web of on-line dictionaries
http://www.facstaff.bucknell.edu/rbeard/diction.html

This Bucknell site - a Web of on-line dictionaries - has links to over 500 dictionaries in over 140 languages. It is, however, only part of a much larger site: buttons at the bottom of the page give access to similar collections in grammar, morphology, and linguistics (this includes a list of language lists for those interested in joining a discussion group).

Human languages pages
http://www.june29.com/HLP/

The Human languages page claims 1800 links, and has more than 170 languages listed. There is also a separate Language Lessons list, not yet very big, which includes a brief comment (1-2 lines) on each link.

General Languages Resources
http://www.hull.ac.uk/cti/langsite/general.htm#indexes

This is a comprehensive list of general languages resources compiled across a very wide range of languages by the Centre for Modern Languages at the University of Hull.

The Language Hub: Worldwide Resources for Languages
http://www.cetrodftt.com/translate.htm

Another very large collection, which claims to service 164 languages.

Large Collections

GlobeGate: A Culture and Language SuperSite
http://globegate.utm.edu/

The Globegate project claims links to thousands of language sites and says that it is organising volunteers to index still more. Its major focus, however, is on French, Spanish and Japanese, with some links to Arabic.

Ohio University CALL Lab: Resources for language learners and teachers
http://www.tcom.ohiou.edu/OU_Language/OU_Language.html

This is the site of the Ohio University CALL lab. It lists 10 languages that it teaches - English, 8 major world languages and KiSwahili. These are basically resource sites, with links to many aspects of culture, though some may provide links to language learning sites.

Department of Foreign Languages and Literatures, Appalachian State University
http://www1.appstate.edu/dept/fll/index.html

This site is largely a home page providing information about the courses in the 7 languages (plus ESL) offered by Appalachian, but it includes links for its languages.

Language Centre of the University of Sussex Language Institute
http://www.sussex.ac.uk/langc/

The Language Centre of the University of Sussex Language Institute provides links for the 7 languages it teaches (plus EFL), along with links to less commonly taught languages, general language links, and useful links to Internet resources.

Linguanet
http://www.becta.org.uk/linguanet/

This site is devoted to collecting and listing general resources for languages and includes a section of links on using the Internet for language learning.

Teaching with the Web
http://polyglot.lss.wisc.edu/lss/lang/teach.html

This site specialises in ideas about using Web resources as a teaching tool. There are not too many, but they have an explanatory essay with them. In addition, there are ideas donated by teachers in language groups. It has lesson plans, list of publications and links to language sites.

2.2) Selected links pages for individual languages

Chinese

Marjorie Chan's China Links
http://www.cohums.ohio-state.edu/deall/chan.9/c-links.htm

China Web Index
http://www.chinascape.org/home.html

French

ClicNet
http://www.swarthmore.edu/Humanities/clicnet/index.html

Tennessee Bob's Famous French Links
http://www.utm.edu/departments/french/french.html

German

Courses and exercises on the internet for teaching German.
http://www.ids-mannheim.de/quellen/kurse.html
&
http://www.ids-mannheim.de/quellen/daf.html

German Studies Trails on the Web
http://www.uncg.edu/~lixlpurc/german.html

Greek

Monash Modern Greek Section Links of Interest
http://www.arts.monash.edu.au/modgreek/mgrlinks.htm

Indonesian

Jendela Indonesia
http://www.iit.edu/~indonesia/

Academic Internet Resources on Indonesia, The University of Auckland.
http://www.auckland.ac.nz/asi/indo/links2.html

Italian

Planet Italy
http://www.PlanetItaly.com/Culture/index.html

Internet Resources: Italian
http://www.ucl.ac.uk/Resources/Arts/italian.htm

Japanese

Jim Breen's Japanese Page
http://www.rdt.monash.edu.au/~jwb/japanese.html

Keiko Schneider's Bookmarks
http://www.nmjc.org/center/personnel/Bookmarks.html

Korean

Gateway to Korea and the Korean Language
http://www.arts.monash.edu.au/korean/links.htm

Language-Specific Online Resources: Korean
http://www.stanford.edu/group/CFLP/lg/korean.html

Portuguese

Language-Specific Online Resources: Portuguese
http://www.stanford.edu/group/CFLP/lg/port.html

Russian

Language-Specific Online Resources: Russian
http://www.stanford.edu/group/CFLP/lg/russian.htmll

Russian Language Resources, Software, Fonts, Russification
http://ourworld.compuserve.com/homepages/DouglasHartman/language.htm

Spanish

The University of Toledo Spanish Language Bookmarks
http://www.forlang.utoledo.edu/BOOKMARK/BookmarkSPN.html

Hot Internet Sites en Español!
http://www.kn.pacbell.com/wired/fil/pages/listspanish.html

Scandanavian Languages

Electronic Resources for the Scandanavian Scholar
http://www.montana.edu/sass/resource.htm

Vietnamese

Language-Specific Online Resources: Vietnamese
http://www.stanford.edu/group/CFLP/lg/viet.html

Appendix 3

Last minute inclusions of sites to keep an eye on

Chinese

Internet based Chinese teaching and learning (La Trobe University)
http://redgum.bendigo.latrobe.edu.au/~zhang/speaking.htm
http://chinese.bendigo.latrobe.edu.au/index.htm

This is an on-line course for beginners aimed at developing fundamental skills in listening, speaking, reading and writing Mandarin Chinese. Information on history, culture and society is included in the course. Registration is required to access all materials.

Developments are under way to provide further levels on-line.

French

Premier Pas sur l'Internet
http://www.imaginet.fr/momes

This is an excellent site to use with primary school children. Recommended by Jenni Manguy.

German

LernNetz Deutsch als Fremdprache
http://www.skolinternet.telia.se/TIS/tyska/

This is an excellent Swedish site that includes extensive links and sophisticated language learning exercises organised by themes and levels of proficiency.

Indonesian

Indonesian at Sunshine Coast University
http://203.29.106.15/Arts/internat/indonesian/indoscuc.html

This site, described as perpetually under construction, aims to provide on-line interactive material for students of the Sunshine Coast University College. There are language learning modules for Indonesian A-D, the first three offering about eight topics each (Indonesian D has not advanced very far yet). Some take the form of multiple choice questions in Indonesian, with the correct answers often accompanied by an illustrative photo. Others require free composition, with the suggestion that the answer be discussed with other students. Audio is built into much of the work, and the site has a grammar file, a dictionary, a chat site and a series of hotlinks.

Indonesian at Monash University, Gippsland
http://www-mugc.cc.monash.edu.au/gss/indones/

This site, integrated into the Indonesian program at the Gippsland campus of Monash University, is under development. It already has a student magazine and plans to stream the existing radio program, develop a student lounge, and link with students at an Indonesian University.

Italian

La Facolta di Italica
http://www.italica.rai.it/3d/3livello/facolta/f_facolta.htm

The site is set up as a University with 4 "Faculties": Renaissance, Language, Literature, Dante. More are to follow.

Japanese

Japanese Studies at Macquarie University
http://www.mq.edu.au/MDLang/Japanese/

Macquarie University's Japanese Studies Department and Fujitsu Australia have developed interactive multimedia kanji teaching packages - Kantaro 1, 2 & 3. They are currently working on developing a comprehensive multimedia Japanese language acquisition course.

The Japanese Association of Macquarie University (JAM) page, linked to this site, promises links to language, chat, culture, education, geography, entertainment, travel etc.

Japanese Language Tutor
http://chrise.itc.gu.edu.au/japanese/index.htm

This is a site that concentrates mainly on teaching the hiragana and katakana scripts. It includes a stroke order demonstration that enables the student to practise writing each character and is an excellent site to send students to for this purpose.

Korean

On-Line Korean Language Study
http://www.interedu.go.kr

This is an extensive site, still under development, for the study of Korean at four levels. It includes a guide to the study of Korean, 60 lessons with practice materials, a bulletin board, an introduction to Korea and information on education in Korea. A minimum browser capability of Netscape Navigator 4 is required to view this site.

Russian

The Russian Language Program at Cornell University
http://russian.dmll.cornell.edu/russian.web/index.htm

This site includes an innovative program for teaching a beginners course in Russian using clips from Russian films. Clips and supporting materials have been placed on the web and the film clips are also available on CD-Rom. The film material forms only part of the Cornell Russian course which includes other work in class and the language laboratory. Evaluation is available only to Cornell Russian students

The site also includes links to dialogues for beginning Russian and a dictionary of the human body.

Spanish

Pasatiempos del Aula de Lengua
http://cvc.cervantes.es/aula/pasatiempos/

This site entirely in Spanish and maintained by the Cervantes Centre offers 10 categories of word games that are intended to support language learning and practice at 4 levels of difficulty from beginners to advanced.

Swahili

Stanford African Language Learning Centre
http://www.stanford.edu/~muratha/

Still in the early stages of construction, this is a Web browsing environment designed to help Stanford students find answers to questions about the language, the people and their land.

Kiswahili Home Page

http://conn.me.queensu.ca/kassim/documents/kiswa/swahili.htm

This site, maintained by The Queen's University Black History Collective, contains links to resources, and offers 9 introductory lessons in the language. The lessons provide no feedback, but the site offers a link to the next site for on-line testing.

University of Pennsylvania African Studies Centre

http://ccat.sas.upenn.edu/plc/kiswahili/kiswahili.html

This University of Pennsylvania site focuses on listening and reading comprehension to support its elementary Swahili course. Tests are fill-ins in a piece of continuous text, with the feedback consisting only of a display of the complete text. Answers to other questions, and pieces of free composition, can be entered on a pro-forma and e-mailed to the instructor.

The Kamusi Project: The Internet Living Swahili Dictionary

http://www.cis.yale.edu/swahili/

This substantial project from Yale is largely focussed on building an on-line dictionary, with pictures, sound, hotlinks, comprehensive grammar and pronunciation guide promised.

Other

Teaching Second Language Speaking Skills

http://online.edfac.unimelb.edu.au/483604/

Totally Web-based Master of Education subject, offered in the Department of Language, Literacy & Arts Education at the University of Melbourne.

Various Languages

Active Worlds

http://www.activeworlds.com/

In Active Worlds users can explore many virtual worlds and create their own virtual world. Students can meet others and interact as a fully 3D, lifelike, animated figure. Sites use objects just like hyperlinks to send mail and surf the web and include games, puzzles and mazes. Users will first need to download the Active Worlds software, which will take some 12 minutes. Sites for German, Spanish, French, Russian, Italian, and Norwegian can be visited by selecting the appropriate browser option on the home page.

Appendix 4

On-line readings related to MUDs and MOOs provided by Stella Peyronel at EUROCALL 98

About E_MOO, n.d.
http://tecfa.unige.ch:4243/about_E_MOO/

Analyse d'un MUD: Lingua MOO, n.d.
http://tecfa.unige.ch/staf/staf9698/roiron/staf18/moo.htm

John Allison, MOOs and Education: their role, and relevance, 1991
http://www.sonoma.edu/IT/ITS/Course_Management/MOOs_and_Education.html

Richard Bartle, Early MUD History, 1990
http://www.ludd.luth.se/mud/aber/mud-history.html

Eric Berthoud, Virtual Education Environment: the case of EON, n.d.
http://tecfa.unige.ch/~berthoud/staf14/eon_overview.html

Amy Bruckman & Mitchel Resnick, The MediaMOO project: Constructionism and professional community, 1995
ftp://ftp.media.mit.edu/pub/asb/papers/convergence.txt

Lauren P. Burka, A Hypertext History of Multi-UserDimensions, 1993
http://www.apocalypse.org/pub/u/lpb/uddex/essay/

Lynn Cherny, Gender differences in text-based Virtual Reality, 1994
http://www.oise.on.ca/~jnolan/muds/about_muds/gt

Lynn Cherny, The modal complexity of speech events in a social mud, 1995
http://lucien.sims.berkeley.edu/MOO/ejc.txt

Pavel Curtis, Mudding, social phenomena in text-based virtual realities, n.d.
http://www.www-marketing.com/virtuelle_gemeinschaft/text/curtis.n01.txt

Pavel Curtis & David A. Nichols, MUDs grow up: social virtual reality in the real world, 1993
http://solix.wiso.uni-koeln.de/etext/text/curtis.93.txt

The Daedalus Group, Inc., MOO teacher's tip sheet, 1995
http://www.daedalus.com/net/MOOTIPS.html

Tari Lin Fanderclai, MUDs in education: new environments, new pedagogies, 1995
http://www.sunsite.unc.edu/cmc/mag/1995/jan/fanderclai.html

Noel Germundson, The social and educational aspects of MUDs, 1994
http://www.oise.on.ca/~jnolan/muds/about_muds/mud.paper

Traci Gardner, Basic MOO information, n.d.
http://www.daedalus.com/4cmoo.html

Martine Gringas, MOOndes virtuels, 1997
http://www.citeweb.net/tour/des_moondes/index.html

Leslie D. Harris, MUDs and MOOs: an overview, n.d.
http://www.susqu.edu/ac_depts/arts_sci/english/lharris/mudsmoos.htm

Cynthia Haynes, Inside the teaching machine: actual feminism and (virtual) pedagogy, 1996
http://www.cwrl.utexas.edu/~cwrl/v2n1/haynes/index.html

Cynthia Haynes & Jan Rune Holmevik, Synchroni/CITY: online collaboration, research and testing in MOO space, 1995
http://lingua.utdallas.edu:7000/748

Claudine Keenan, Technology in English 015: Building Low-Cost, High-Powered Writing Communities, n.d.
http://www.an.psu.edu/cgk4/keenan.html

Malcolm McAfee & Ken Eustace, Beyond the WEB and the MOO in education, 1995
http://www.csu.edu.au/research/sda/Papers/webmoo.html

Jerome P. McDonough, MOO/MU* Document Library, n.d.
http://lucien.sims.berkeley.edu/moo.html

Matthew McKinzie, Using the MOO as an avenue of critical thought, n.d.
http://www.ucet.ufl.edu/./~mckinzie/MOOthought.html

D. William Moss, MOO MOO Mutants: Master's Thesis, 1997
http://www.mmmutants.com/files/documents/general/thesis.html

Elizabeth Murphy & Jacques Rhéaume, Constructivism: From Philosophy to Practice, 1997
http://www.stemnet.nf.ca/~elmurphy/emurphy/cle.html

Jason Nolan, Academic and other writings about Muds & Moos, 1994
http://www.oise.on.ca/~jnolan/about_muds.html

Jason Nolan, Over schooled and under educated, 1995
http://www.oise.on.ca/~jnolan/comps/comp2.html

John Oughton, Genderbending on the Mush, 1993
http://www.oise.on.ca/~jnolan/muds/about_muds/ours/john1

Vivian Rice, Information about MOOs, 1995, updated 1998
http://Wrt.syr.edu/wrt/teachers/ricewww/vivianstuff/moopage.html

Michael S. Rosenberg, Virtual Reality: reflections of life, dreams, and technology. An ethnography or a computer society, 1992
http://lucien.sims.berkeley.edu/MOO/ethnography.txt

Daniel K. Schneider, The evolving TecfaMOO Book, 1996
http://tecfa.unige.ch/moo/book1/node1.html

K. Schwienhorst, Talking on the MOO: Learner autonomy and language learning in tandem, 1997
http://www.tcd.ie/CLCS/assistants/kschwien/Publications/CALLMOOtalk.htm

Charles J. Stivale, 'Help manners': Cyber-democracy and its vicissitudes, 1996
http://wwwpub.utdallas.edu/~cynthiah/lingua_archive/help_manners.html

Steve Thorne, Humanities Interest Group: MUDs, MOOs, MUSHs, 1996
http://central.itp.berkeley.edu/MOO.html

G. Trentin, Le teconologie della comumicazione via rete, n.d.
http://www.itd.ge.cnr.it/td/td2/trentin1.htm

Lonnie Turbee, MOO and IRC: what's the big difference to the language learner?, 1996
http://web.syr.edu/~lmturbee/mooyirc.html

Lonnie Turbee, MOOing in a foreign language: how, why, and who?, 1996
http://web.syr.edu/~lmturbee/itechtm.html

J. Turner, Some Problems and Some Reasons to Ignore Them, n.d.
http://elicos.qut.edu.au/moo/mprobs.html

Janice R. Walker, Workshop on Synchronous Communication, 1997
http://www.cas.usf.edu/english/walker/papers/cte/cte.html

Rachel Wilson, Using MOOs (Multiuser Object-Oriented Environments) in Education, 1997
http://www.sonoma.edu/people/SmithR/moo.html

What's a virtual educational environment (VEE)?, 1997
http://www.athena.edu/campus/vee.html

What's MOO?, 1998
http://www.athena.edu/whatmoo.html

Jeffrey R. Young, Textuality in cyberspace: Muds and written experience, 1994
http://www.csi.uottawa.ca/~dduchier/misc/jryoung1.html

Jan Rune Holmevik, Archive and Resource page, 1997
http://wwwpub.utdallas.edu/~cynthiah/lingua_archive/archive.html

About Little Italy

Walter Aprile, Informazioni su Little Italy (Non si capisce proprio niente?), 1995
http://kame.usr.dsi.unimi.it/home/walter/HUG/LI.html

Walter Aprile, Informazioni su MOO, 1995
http://kame.usr.dsi.unimi.it/home/walter/HUG/MOO.html

Marco Beltrametti, Analyse d'un MOO: Little Italy, 1996
http://tecfa.unige.ch/staf/staf9597/beltrame/STAF14/analyse_MOO.html

Little Italy Home Page, n.d.
http://little.usr.dsi.unimi.it:4444/

Little Italy MOO. WWW tour, n.d.
http://little.usr.dsi.unimi.it:4444/OBJ/19087

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Easy access to sites is available from the CD-ROM

Virtual language learning: finding the gems amongst the pebbles and the accompanying CD is an essential guide for:

- Language teachers who wish to integrate interesting sites and ideas into their curriculum.
- Anyone who wishes to refresh or improve a language or get a feel for a new one in the comfort of their own home
- Teachers who are toying with the idea of developing their own courses or materials on the Web
- People who wish to learn more about approaches to language teaching, and in general to delivering courses, on the Web

The Web is a treasure-house of resources, but it is also bewilderingly complex. If this potential is to be tapped, some guidance is required – guidance most of all to what is there, but also to how it might be used.

This book provides that guide for languages. It focuses on detailed accounts of good examples of different approaches to teaching and learning a language via this medium.

This is a unique approach to the topic, offering a combination of tangible examples and jargon-free technical information, informed by the experience of a practising language teacher with a special interest in how technology can best be used for language learning. The book includes references to literature as well as to technology. When Moo sites are discussed, for instance, readers will be able to look up the relevant applied linguistic literature, try out a site in several languages, and find out how it saves hundreds of hours of searching.

Associate Professor Uschi Felix is Director of the Language Centre at Monash University. She has a research background in applied linguistics, especially in innovative teaching methods, teaching evaluation and language teacher education. During the last decade her work has focussed on CALL in all its various aspects, concentrating on the systematic integration into the curriculum of tested CALL applications from stand-alone software to WWW sites.

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